1. Megapodius cumingi Dillwyn.
Mound Bird; Cuming's Megapode.
Tah'-bonn (Moros and Viscayans of Zamboanga).

Tomentomen Yacans of Basilan.
Abundant on the island of Basilan.
Found on the island of Sulu, November 12–26, 1903.

On the island of Bulwan, off southern Mindanao, February 1, 1904, a nest or bed of this species was seen, in which native Moros had been digging for eggs. We searched further but found none.

On a small island off Cagayan Sulu, in the Sulu Sea, opposite the residence of Senor Mariano de Lion, four mounds of this bird are known to Mariano, who knew of none on Cagayan Sulu Island.

At Zamboanga, Mindanao, P. I., a Moro lad brought me two fresh eggs, March 1, 1904; and my cook bought a number of them during the month of March. These eggs were also sold in the Zamboanga market in February and April.

In February, 1904, Captain Robert O. Van Horne, 17th Infantry, U.S. Army, Governor of the Cottabato District shot and skinned a specimen — afterwards lost overboard ~~bounced~~

(Sheet II.)

1. Megapodius cumingi Dillwyn. Cuming's Megapode.
— which, if not a hybrid between the Mound Bird and Jungle Fowl must have been a new species. He obtained it on Island, off the mouth of the Rio Grande de Mindanao.

In ascending the Tubay River, between Tubay and Santiego, April 22, 1904, several were seen running about on the sandy shores, ~~near~~ between the ~~grass~~ water and the grassy bank.

Noted at Labas, Libungan Valley, east of Cotabato, Mindanao, March 12, 1904.

On the banks of the Tubay River, northeastern Mindanao, April 22 to 24, 1904, quite a number were seen on the sandy shores near the cogon grass, where they appeared much as Mud Hens (Fulica) would.

Numerous on these little wooded islands off the south end of Dibutu Island, January 5, 1906.

Balambing, on the northwest shore of the Island of Tawi Tawi, P. I., January 6, 1906.

Casiguran, east coast of Luzon, June 1, 1907.

Baler, east coast of Luzon, June 2, 1907.

Manay, east Mindanao, October 6, 1906.

On Tumindao Island, off Sitanki Island, October 13, 1906, 2 birds and many mounds were seen.

Megapodius cumingi Dillwyn.

Numerous on Manuk Manka Island, S.W. Philippines, January 6, 1906.

Sibutu town, west coast of Sibutu Island, January 7, 1906.

Nesting mound (fresh) on East Bolod Island, January 10, 1906.

Very numerous, January 10, 1906, on Baluk Baluk Island, off Basilan Island, where at least half a hundred of their nesting mounds were seen and a specimen was taken. This individual's stom=ach contained insect remains, seeds, and two small bivalve shells, together with some gravel.

From Jolo to Maimbun, Seraln Lake, around Bud Dajo to Siet Lake, March 1 and 2, 1906; one seen on Siet Lake Beach, March 2, 1906; eggs offered for sale in Jolo and other Sulu markets.

Eggs were supplied to the crew of the Mindanao, from Huga Island, 1907.

Eggs nearly always on sale at Zamboanga markets.

Numerous at [camp No. 4 of the first mapping expedition to Basilan Island (camp of Jan. 30 and 31, 1906)], west Basilan; March 3, 1906.

Pangpiang, Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Igat Bay, off southern Mindanao, April 2, 1906.

Halima Island, Dumanquilas Bay, off S. Mindanao, April 2, 1906.

1

(Sheet III.)

Megapodius cumingi Dillwyn.

Cuming's Megapode.

Very abundant on Huga Island P. I., May 29 and 30, 1907. Small young were running about. The largest mound seen was 6 long paces periphery to center and 3 feet high. Eggs were sent out to the crew of our ship for food. A wounded bird uttered a whining cry when pursued. Five were shot by the party on Huga.

Near Isabella, Basilan Island, January 26, 1906.

6 Miles west of Isabella, Basilan, January 28, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906. Our little dog "Pilay" treed two of them in northwestern Basilan, between Camp No. 4 and Camp No. 5, Jan. 31, 1906.

Camp No. 5 to Camp No. 6, interior of Basilan, February 1, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Jumahobang River, south side of Basilan Id., Feb. 16, 1906.

Camp No. 4, on the Buli Buli River to Camp No. 5, south Basilan, February 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Abundant in the vicinity of Malusa, west Mindoro, February 19, 1906.

Camp No. 7 to Camp No. 8, interior of west Basilan, February 20, 1906.

Camp No. 8 to Camp No. 9 (Musser's plantation 2 miles west of Isabella, Basilan Island, February 21, 1906.

Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.

Po'-go (Moros of southern Mindanao). (Sheet I.) 2

Excalfactoria lineata (Scopoli).

Painted Quail; Blue-breasted Quail.

Dusky 4-toed Quail. These ~~may possibly be~~ are females and young of Excalfactoria ~~or Treron~~. At any rate a sufficient number have been collected to settle the species.

Small, dusky Quail were noted at Zamboanga, Mindanao, P. I., October 10-16, 1903.

Dusky Quail were flushed from the cogonal at Makar, Sarangani Bay, southern Mindanao, Oct. 26, 1903.

Dusky Quail were frequently seen at Camp Pantar, on the Agus River, and all the way around Lake Lanao, in central Mindanao. This is the same as specimen No. 13122, killed on Romayn River, on the east side of Lake Lanao, November 6, 1903.

The 4-toed Quail (No. 13122) of Lake Lanao seemed different from those from Zamboanga. See specimens.

At Buluan, southern Mindanao, January 31, 1904, I shot a female (No. 13313), one of a flock of about 15 flushed from a trail in the edge of a cogonal. Another, a small young one, was caught but escaped. Moro name: Po'-go.

At Lubiingan, northern Mindanao, P. I., February 14, 1904, small Quail were seen running like mice through the shrubbery whence I could not flush them.

Noted at Iligan, northern Mindanao, Febr. 15, 1904.

2. Excalfactoria lineata (Scopoli).

Female from Camp Vicars called Noc-sahm'-ba by Moro Jim (Bakebake
Male " " Koo-yu'-buk " "

Painted Quail; Blue-breasted Quail.

Quails were abundant on the island of Sulu. The only ones shot (at Jolo) were three-toed; but some of those seen (November 12-26, 1903) may have been this species, which is known to abound on the island.

A Quail called Pertises or Poo'-go is found on the island of Cagayan Sulu, P. I., but I saw none there. Common at Pantar and Marahui in Aug. & Sept., 1903.

Noted along the road from Malabang to Camp Vicars, March 31, 1904.

At Camp Vicars (3000 ft.), April 1, 1904. Specimen (13428) shot.

Seen from Camp Vicars to Sauir, on Lake Lanao, Mindanao, April 2, 1904.

On April 6, 1904, Quail were found on the marshes bordering the hills on the upper course of the Taraca River. At Huahulama's cota, April 7, 1904. Flocks of Quail were seen April 8, 1904, from Galauan to Basayan, Lake Lanao Basin; families with young apparently about half grown.

Noted at Camp Vicars (altitude about 2900 feet), September 28 and 29, 1903.

Seen at Malabang, S. Mindanao, Oct. 7-9, 1903.

Seen at Parang, S. Mindanao, September 30, 1903.

Seen at Buldung, between Parang and Lake, Butig, Mindanao, October 1 and 2, 1903.

Excalfactoria linnata (Scopoli). (Sheet III.)

Po'-go (Moro). Painted Quail; Blue-breasted Quail. Dusky, 4-toed Quail

Senor Mariano de Leon, President of the Island of Cagayan Sulu, in the Sulu Sea, informed me that a Quail called Pertises or Poo'-go (Moro) is common on that island. Probably Excalfactoria liniata.

Abundant at Cottabato, Rio Grande Valley, Mindanao, March 3 to 5, 1904.

Many living birds, in cages, offered for sale in Manila markets — also a few on the streets — during August and Sept., 1905.

Noted on the Malala and Numbawata rivers, on the trail from Buluan to Simpitan, Mindanao, May 23 and 24, 1904.

Observed at Davao, southern Mindanao, July 15 to 20, 1904.

In the Manila markets these birds are sold at about two cents gold apiece.

Numerous at Mercedes, 9 m. E. of Zamboanga, Mindanao, March 28, 1906.

Noted on Lake Lanao and at Pantar, Mind., Aug. & Sept., 1903.

The broad cogonal extending from the Beranaya Marsh, where Datto Ali's fort was situated, to the foothills of the Libungan Valley ~~in the~~ at Labas, east of Cotabato, southern Mindanao, which I traversed March 12 and 13, 1904, was the home of many painted quail.

At Baliangao, on Murcialagos Bay, northern Mindanao it was abundant living in cornfields and cultivated lands, May 13, 1904. Several were shot and skinned.

2 (Sheet IV.)

Excalfactoria lineata (Scopoli).

Dagupan to Pozorrubro, Pangasinan Province, Luzon, Nov. 30, 1905.

Meade Road, Benguet Province, Luzon, December 13, 1905.

I have an egg laid by a bird that was sold me with others, alive, at the Army and Navy Club, Manila.

I shot a few of these birds at Laoag, Ilocos Norte Province, Luzon, January 31, 1907. My Ilocano boy had never seen them before, so it is probably rare as I only saw them in one field.

Two were seen at 2000 feet altitude on the base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

One shot at the base of Mount Mayon, near Tabaco, Albay Province, Luzon, June 4, 1907.

One flock on the trail from Naujan to Lake Naujan, eastern Mindoro, March 25, 1907; some at Lake Naujan.

4 Miles west of Isabella Basilan Id., January 28, 1906.

"Jan. 29, 1906.—Excalfactoria is abundant on Basilan Island, though I have seen but few on this trip."

~~Three~~ Four were noted between Tipo Tipo, in the interior, and the south coast of Basilan Island, February 16, 1906.

Musser's plantation, 2 miles west of Isabella, north Basilan, February 21, 1906; No. 13979, Ad., collected.

3. Gallus gallus (Linnaeus).
Mountain Fowl: Jungle-Fowl.
Mah-nook' Tah'-loong, Bagobos of Mount Apo, Mindanao.

Heard crowing along the road from Malabang to Camp Vicars, especially above Watating Falls, Aug. 31, 1904.
Abundant at Pantar and Marahui in Aug. & Sept., 1903.

On October 26, 1903, on a sandy cogonal near Makar, on Sarangani Bay, southern Mindanao, October 26, 1903, I flushed a flock of five Jungle Fowls, most of which alighted in some trees 200 yards away, whence they were flushed one at a time. I killed a fine cock, but could not find it in the jungle. This gave me a fine opportunity to observe the flight of the Jungle Cocks, which is strong and swift. I have always found them hard to hit and tough to kill.

October 26, 1903, Captain Langhorne, U.S. Army, shot at a Jungle Cock, at Glan, southern Mindanao.

November 12–26, 1903,

On the island of Sulu, the Jungle ~~Fo~~ Cocks were heard crowing. On Mt. Suleiman General Wood, who rode ahead flushed one from a gullley in ~~the~~ one of many open cogonals near the mountaintop. It uphill very swiftly and strongly alighting in the grass far above us. It looked ~~much~~ like a Grouse.

3. Gallus gallus (Linnaeus). Jungle-Fowl.

Three cocks flew across a wide river near Mucas, on Sarangani Bay, northern Mindanao, February 16, 1904.

Many cocks heard on the hillside behind Santa Maria, northern Mindanao, P.I., February 17, 1904. As usual, they would stop crowing when approached closely, and take vigorous flight in the direction of the densest part of the forest-jungle.

I found the Jungle Fowl common on the island of Cagayan Sulu, in the Sulu Sea, P.I., February 25 and 26, 1904. On the 25th several were flushed from a wooded hillside and an old rooster was shot but could not be recovered owing to the nature of the ground. Some were seen on densely wooded slopes, others in open or rocky grass land. On February 26 one hen seen.

Numerous at Cotlabato, in the Rio Grande Valley of southern Mindanao, March 3-5, 1904. Captain Van Horne showed me a specimen from Island, off the mouth of the Rio Grande, which may have been an hybrid between the Jungle Cock and Mound Bird.

Abundant at Pantar and Lake Lanao, in Aug. & Sept., 1903.

As I rode from Camp Vicars to Malabang, Mindanao, April 11, 1904, many cocks were heard crowing. Noted at Isabella, Basilan, Jan. 19, 1904.

(Sheet III.)

3 Gallus gallus (Linnaeus).

Jungle-Fowl.

Noted all along the route from Parang to Lake Buliig, through Cararao Pass, Sept. 30 to Oct. 6, 1903.

Some seen and shot at, at Glan, southern Mindanao, October 26, 1903.

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

One was shot at San Ramon Farm, 15 miles northwest of Zamboanga, March 23, 1906. Wild Jungle Fowl are abundant there.

Abundant at Pintar, Mindanao, in August, 1903.

Jungle fowl were abundant in the Libungan Valley, east of Cotabato, southern Mindanao, March 12 and 13, 1904.

Madalum and Banganan River, South Coast Range, Mindanao, September 30 to October 3, 1903.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904. Veranuya Fort, March 11-13, 1904.

Ade's plantation to the River, eastern Mindanao, April 27, 1904.

Noted on the Bacoco River, a tributary of the Cagayan, in eastern Mindanao, May 4, 1904.

Agusan River, from Pilar to Jativa, Mind., May 6, 1904.

Patrocino to Veriella, Agusan River, Mindanao, May 7, 1904.

Banban River near Camp Hotsenberg, Luzon, Nov. 28, 1905.

Twin Peaks, Buad River Valley, Luzon, December 1, 1905.

(Sheet IV.)

Gallus gallus (Linnaeus).

One was seen on the actual summit of Mount Santo Tomas, about 7 feet, Benguet Province, Luzon, December 10, 1905.

Balambing, on the northwest shore of the Island of Tawi Tawi, P. I., January 6, 190[illegible].

Pidsan, Ilocos Norte, Luzon, January 11, 1907.

Two were seen on a trail over the sand hills between Laoag and Vintar, Ilocos Norte, Luzon, January 23, 1907.

One seen in a trail, near Paoay Lake, Ilocos Norte Province, Luzon, January 27, 1907.

One seen in the road south of the Bojeador lighthouse, Ilocos Norte Province, Luzon, February 15, 1907.

Burdett Manganese Mine, extreme NW. point of Luzon, February 19, 1907.

The jungle-fowl was very abundant around Nagpartian, Ilocos Norte, Luzon, February 15 to March 9, 1907. Not infrequently some would appear with the domestic fowls on the plaza; and twice I saw a bluish domestic hen go out into the jungle, following a trail for near a mile to meet her lover — a wild jungle-cock.

Several were seen in the road between Bojeador light and Pasuquin, Ilocos Norte, Luzon, March 9, 1907.

A hen and 4 chicks were collected at one shot near Currimao, Ilocos Norte, Luzon, March 13, 1907.

(Sheet V.)

Gallus gallus (Linnaeus).

Mr. Worcester, during 5 years residence near Baguio, in the highest part of the Benguet highlands, saw none at or near his place; and Mr. Taylor had not seen them ~~so~~ at his ~~place~~ home in Manila, nor in Spanish; but they are common at the spring of Mount Santo Tomas, Benguet.

Common at the spring on Mount Santo Tomas. Abundant signs at summit of Santo Tomas, Dec. 31, 1906 and Jan. 1, 1907. Altitude of summit [illegible] feet.

Noted on the slope of Mount Mayon, Legaspi side, up to 2500 feet, Albay Province, Luzon, March 28, 1907. "Cocks crowing; abundant."

Abundant at Casiguran, east coast of Luzon, June [illegible]

Baler, east coast of Luzon, June [illegible]

Base of Mount Mayon, near Tabaco, Albay Province, Luzon, ~~May 4~~ June 4 and 5, 1907.

Very abundant on Huga Island, P. I., May 29 and 30, 1907. Young chicks were seen with the hens. Notes when taking flight the same as those of the domestic cock and hen. Feeds, like the pigeons of the island, largely upon fruits. Eleven (11) were shot by General Wood's party on Huga Island.

Scarce, because so many snares are worked by the Mangyanes, on Mt. Halcon between camps 3 and 5, Nov. 12-17 and 25-28, 1906. Cocks heard crowing and a few birds flushed. Altitude 2250 to 4500 feet.

(Sheet VI.)

Gallus gallus (Linnaeus).

Balut Island, Sarangani group, January 23, 1906.
Camp No. 2, west of Isabella, Basilan Island, January 28, 1906.
Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.
Camp No. 2 to Camp No 3 (at Tipu Tipu), Basilan, Feb. 15, 1906.
Camp No. 4, on the Buli Buli River to Camp No. 5 south Basilan, February 17, 1906
Camp No. 8 to Camp No. 9, north Basilan, February 21, 1906.
Henry Musser's plantation, 2 miles west of Isabella, Basilan Island, February 22, 1906.

Mr. Teacle, Yoeman, U.S. Navy, stationed at Isabella, Basilan Island, kindly sent me a beautiful pair of jungle-fowl, trapped near Isabella, Basilan, March 19, 1906. Full description of the unfeathered and soft parts, with measurements, are entered in my field notebook of the Second Basilan Mapping Expedition.

Bud Dajo Peak, Sulu Island, October 11, 1906

October 17, 1906, I bought a stool cock from a Tagbanoa native at a village 5 miles inland from Bona Bona, San Antonio Bay, east Palawan.

Jolo to Maimbun, Bud Dajo, Crater Lake and Dait Lake, Sulu Island, March 1 and 2, 1906.

(14.) Puerto Princesa, east Palawan, September 11, 1906, Governor Miller showed me skins collected by Sergeant Neumann of the Hospital Corps, U.S. Army; and Treasurer Martin, of Puerto-Princesa, informed me that jungle fowl are abundant in that vicinity. In fact Sergeant Neumann sent me 3 fine living cocks to Zamboanga.

Im-piss', Moros of Zamboanga (downy young). (Sheet VII.)
Mah-nook', Bak'-ti (house chicken), Bagobo name for domestic fowl.
Gallus gallus (Linnæus).

Cocks were heard crowing on the shores and islands of Malampaya Sound, ~~east~~ west Palawan, September 12, 1906.

Four jungle-cocks were sent me from Puerto-Princesa, Palawan Island, by Sergeant Emanuel Newman, Hospital Corps, U.S. Army.

Suling, east shore of Davao Gulf, Southern Mindanao, June 12, 1904.

As soon as we reached Camp Goodfellow, altitude 6000 feet on Mt. Apo, Mindanao, June 17, 1904, a little chicken was heard peeping and was caught by Furman: No. 13412, ♂ juv., etc.

Roosters crowing on hilltops around Camp Goodfellow on Mount Apo, Mindanao, July 3, 1904.

Turnix suluensis Mearns.

[illegible] Bustard – [illegible] or [illegible].

This 3-toed Quail was first observed (November 14, 1903) when marching across the island of Sulu, from Hassanista to Upa's [illegible]a. They fly up from the grass much like the [illegible] Quail. On the march across Sulu Island, from Upa's cotta to a camp at the foot of Crater Mountain, November 15, 1903, many were flushed from the trail. In our forays against Moros from this camp during the days following a great many [illegible] Quail were flushed. It is true, abundant [illegible]. Some were seen around Mt. Sulaiman, November 19 and 20. Noted at Taglibi and Jolo, November [illegible], 1903. Two were shot at Jolo, November 25 and 26, 1903. One (No. 13141 ♀ad) specimen preserved. Sometimes flushed in wet marshy places, again on dry uplands where grass or garden weeds afford cover. Jolo to Maimbun, Bud Dajo, Crater Lake and Sicat Lake, Sulu Island, March 1 and 2, 1906; several flushed.

(Sheet 1.)

Sus ix whitehead Grant.

Two were seen at Camp Stotsenberg, Luzon, November 28, 1905 (2d Flesh [illegible])
Several living specimens were obtained in the Manila market, just before I left the P. I., and made into skins.

Wuh'-uk (Igorotes of Benguet). (Sheet I.)

Furnix ocellata (Deopoli).

Baguio, Benguet Province, Luzon, December 1-12, 1905

Base of Santo Tomas Peak, alt. 5500 feet, Benguet Province, Luzon, Dec. 19, 1905

One seen on a grady ridge between Laoag and Vintar, Ilocos Norte Province, Luzon, January 23, 1907.

Two were in the road, midway between Laoag and Vintar, Ilocos Norte Province, Luzon, January 24, 1907.

One at Paoay Lake, do " 27, "

Several beside a trail on "ogine" do February 5, "

One pair in sandy hills between Laoag and Vintar " 7, "

One near Davila, Ilocos Norte, Luzon, February 15, 1907.

Several were seen in the road from Nagpartian to Bangui, in the extreme north of Luzon, February 15 to March 9, 1907. They always ran into the forest jungle at either side of the road, where I shot one, from the roadside, February 26, 1907. Others were occasionally flushed from the grass near wooded country, They were most frequently found at the edges of pools surrounded by grass hills, to which they would often fly.

One crossed the road near Bojeador Light, Ilocos Norte, Luzon, March 9, 1907.

During my residence at Haight's in the east, in the northern border of Benguet Province, Luzon, I saw no quail; but several were brought me by native Igorotes who said it was not uncommon; and Mr. Platin informed me of its occurrence at his home up Mancocian in Lepanto.

Poó-nee, Bagobos of the west shore of the Gulf of Davao, Mindanao. (Sp. cit. I.)

8. Osmotreron axillaris (G. R. Gray).

Philippine Green Pigeon.

A wounded male was shot and brought in from Mercedes 9 miles east of Zamboanga, March 25, 1906, by Captain James P. Jervey, engineer corps, U.S. Army. Kept as a pet. Small flocks were seen on the Malala and Numbawata rivers, on the trail from Buluan to Simpitan, Mind., May 23 and 24, 1904. On October 25, 1906, exploring some caves and Moro shacks on the rocky shore at Malizam, southern Mindanao, General Wood ordered a landing. With a Moro for guide, I made a brief exploration of a steep ravine and ~~[illegible]~~ my first acquaintance with this beautiful Pigeon. In the deep canyon its guttural, gurgling call was heard from the tops of tall trees. I fired into a tree 150 feet in height, filled with Pigeons, and brought down one whose crop was filled with berries about the size and shape of the red coral bean of the Texas "laurel".

One was shot on the Cabasaran River, southern Mindanao, P.I., January 30, 1904, when hundreds were feeding on the fruit of tall trees that overhung the water; also in flocks on the Cabasaran River and at the residence of Datto Sakis Hasin two miles from it and six miles inland. ~~in the interior~~. One shot at Zamboanga, April 1, 1906.

(Sheet II.)

Osmotreron axillaris Bonaparte
Philippine Green Pigeon.

These birds were quite numerous about Zamboanga, Mindanao, P.I., in small flocks, along streams, feeding on the treetops, January to April 9, 1906. Many were shot for the table. A tame male one, kept in my house several weeks and then transferred to the Zamboanga Zoo., was gentle, and purred like a cat when stroked, in the wing. His wanderings were restricted by a string attached to one foot. The amount of food (banana and papaya) that it consumed was remarkably large. The stiff feathers of flanks reminded me of pantlets dropping outside the shanks. Its attitudes were very uncon= =ventional for a Pigeon, and it continually ruffled and preened its feathers. A beautiful bird!

The region of southern Mindanao, east of Cotabato, lying between the Deranaya Marsh and Labas on the upper course of the Libungan River much resembles the prairie country of central Florida, north of Lake Okeechobee. The grassy expanses are interspersed by narrow strips of heavy timber in the creek bottoms and interspersed by ~~two~~ occasional mounds of tall trees, in which this pigeon was seen in abundance on March 12 and 13, 1904.

(Sheet III.)

Osmotreron axillaris Bonaparte

Pianga to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

Alde's plantation to the River, eastern Mindanao, April 27, 1904.

Noted on the Baroog River, a tributary of the Agusan, in eastern Mindanao, May [illegible]

At Tingali, on the lower Baroga River and thence to Compostela on the Agusan River, May 5, [illegible]

Abundant on the upper Agusan, below Compostela, in the interior of Mindanao, May 5, 1904.

Agusan River from Pilar to Jalica, Mindanao, May 6, 1904.

Lake Linao to Talacogon, Agusan Valley, Mindanao, [illegible]

In Ilocos Norte Province, Luzon, I found this species only in the vicinity of Currimao.

Kowé-ch, natives of Basilan.

Paloma, Filipinos of Basilan.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906, when one was collected (No. 139[illegible]

Camp No. 5 to Camp No. 6, south Basilan, [illegible]

Vicinity of Malusa, west Mindoro, February 1[illegible]

Henry Musser's plantation, 2 miles west of Isabella, north Basilan, February 22, 1[illegible]

Six shot, 3 specimens preserved ♂ ♀ (14411-13), on Joran (opposite Ubian) Island, October 12, 1906. [illegible] In small flocks.

7. Osmotreron vernans (Linnaeus).
Pink-necked Green Pigeon.

Noted at Puntar, Mindanao, August , 1903

One pair was seen on the Rio Grande above Cottabato, Mindanao, October 9, 1903.

Flock of five (5) at the heads of a wooded ravine in a cogonal at Makar, Sarangani Bay, southern Mindanao, October 26, 1903.

Major-General Leonard Wood, U.S. Army shot a pair at Ilian, southern Mindanao, October 26, 1903.

An Osmotreron (like No. 13143 ♀ ad.) was found in abundance on the island of Sulu, November 12–26, 1903. Some were seen about Crater Mountain, November 15–18; on Mt. Sulieman, November 20, 1903; [Some of these may have been O. vernans and others O. axillaris.] common in the hills behind Jolo, November 21–26, 1903.

At Zamboanga, Mindanao, P.I., December 2, 1903.

Noted on Pangapuyan Island, off ~~Zamboanga,~~ Mindanao, about 12 miles east of Zamboanga, December 11, 1903; specimen collected December 19, 1903, when it was feeding on berries of a tree and was numerous; another one shot February 2, 1904, on Pangapuyan Isl

(Sheet II.)

Pink-necked Green Pigeon.

7. Osmotreron vernans (Linnaeus).

I found this Pigeon abundant at Mercedes, 9 miles east of Zamboanga, Mindanao, December 19 and 20, 1903. Two nestlings were taken from a nest similar to that of the Mourning Dove in the U.S. It was in a small tree, with the nest about 15 feet above the ground. The parent lit upon the nest while I was picking up a Cuckoo shot in the same tree as this nest. When it saw me, it flew down, and fluttered along the ground and in the tops of the tall grass and weeds.

Seen at Buluan, opposite Buluan Island, southern Mindanao, P. I., January 31, 1904.

Noted on the Cabacaran River, southern Mindanao, Jan. 31, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Abundant at Cottabato, southern Mindanao, March 3 to 5, 1904.

It was quite numerous along the Buluan River, which connects Lake Buluan with Lake Liguasan, Mindanao, May 20, 1904; more numerous, and in small (up to six) flocks, May 21, 1904, as we approached Lake Buluan. On the upper part of the river the species was quite numerous.

Common in the woods bordering the Malala and Numbawata rivers, on the trail from Buluan to Simpitan, Mindanao, May 23 and 24, 1904; also at Simpitan, May 24 and 25, 1904.

Osmotreron vernans (Linnaeus).

Pink-necked Green Pigeon.

It was again observed, when descending the Bulwan River, from Bulwan ~~to~~ as far ~~down~~ as Pandog, May 27, 1904

Noted at Placer, northeastern Mindanao, April 20, 1904.

" " Bacuag, " " " 21, "

" " Surigao, " " " 21, "

Abundant at Zamboanga, Jan. to April, 1906.

Capt. George T. Langhorne shot 2 at Mercedes, Mindanao March 28, 1906.

Ayala, April 24, 1906.

Noted at Davao, Mindanao, in August & Sept. 1902

Abundant between the Peramaya Marsh and Labas, in the Libungan Valley, east of Cotabato, in southern Mindanao, March 12 and 13, 1904.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904.

Cole's plantation to the River, eastern Mindanao, April 27, 1904.

Noted on the Bacaca River, a tributary of the Agusan, in eastern Mindanao, May 4, 1904; also at Tingali, on the lower Bacaca River, and thence to Compostela, on the Agusan River, May 5, 1904.

Heard on the upper Agusan, below Compostela, May 5, 1904.

(Sheet IV.)

Osmotreron vernans (Linnaeus).

Agusan River from Pilar to Nativa, Mindanao, May 5, 1906.
Lake Linao to Talacogon, Agusan Valley, Mindanao, [illegible]
Camp Gossman, Island of Guimaras, December [illegible]
Large flocks, near Dairla, Ilocos Norte, Luzon, February 15, 1907; feeding on fruit of medium sized trees.
Burdett Manganese Mine, extreme N.W. point of Luzon, February 19, 1907.

In the region surrounding Nagpartian, in the northern extremity of Luzon, this species is extremely plentiful, and affords good sport. During my stay at Nagpartian, from February 16 to March 9, 1907, many were seen in the village, usually in pairs, though outside the village a score or more were sometimes flushed from one of the small trees ~~in which~~ on which fruit they were then feeding. They were mostly paired; but four that I brought down at one discharge were all males.

Abundant; flocks at sealevel between Bojeador and Pasuquin, Ilocos Norte, Luzon, March 9, 1907. Its note is a hollow booming that reminds one of the notes of the coucals.

Pilipot Springs, near Tibi, southeastern Luzon, June 3, 1907.
Few in the timber zone on the base of Mount Mayon, Tabaco side, June 4 and 5, 1907.
Bodc, ~~Moro~~, Isabella, Basilan, January 27, 1906.
Camp No. 4, on the Buli Buli River, to Camp No. 5, south Basilan, February 17, 1906.

Poó-ni, Moros of Siasi Island. (Sheet V.)
Osmotreron vernans (Linnaeus).

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.
Camp No. 7 to Camp No. 8, interior of west Basilan, February 20, 1906.
Camp No. 8 to Camp No. 9 (Musser's), N. Basilan, Feb. 21, 1906.
Henry Musser's plantation, 2 miles west of Isabella, north Basilan, February 22, 1906.

A large series of males (only) from Nagpartian, Ilocos Norte Province, Luzon (northwest corner of Luzon Island) was compared with males from Mindoro, Bohol, Culion, and Palawan islands. No difference was discovered.

Sibutu town, west coast of Sibutu Island, January 7, 1906 (see female specimen).

Common at Siatu, Siasi Island, January 9, 1906, when one was collected.

East Bolod Island, Sulu Sea, January 10, 1906.

Jolo to Maimbun, Bud Dajo, Ceralin Lake, and Diet Lake, Sulu Island, ~~Jan~~ March 1 and 2, 1906.

Camp No. 4 , west coast of Basilan, March 3, 1906.

Malabang, southern Mindanao, March 15, 1906.

Captains James P. Jervey and George T. Langhorne shot some of these birds at Mercedes, 9 m. E. of Zamboanga, southwestern Mindanao, March 16, 1906.

(Sheet VI.)

Osmotreron vernans (Linnæus).

Ayala, western Mindanao, August 27, 1906.

I made the following note: "Look over my Osmotreron skins from the southern islands to see if any are Osmotreron cuneiti, which has been found on Bongao, Sibutu, and Sulu islands."

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Cooing loudly, at Davao, southern Mindanao, June 13, 1904.

Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.

Davao, southern Mindanao, July 19, 1904.

Phapitreron leucotis (Temminck).

On at 2000 feet, on the slope of Mount Mayon which faces Legaspi, Albay Province, Luzon, March 24, 1907.

One, on the Naujan River, eastern Mindoro, March 25, 1907.

Subaan to Benibi River, Mindoro, Nov. 2, 1906.

Benibi River, Mindoro, Nov. 4 and 5, 1906.

Subaan, east coast of Mindoro, December 5, 1906.

Specimen: No. 14533. ♀ ad. Subaan, eastern Mindoro, Dec. 5, 1906.

Sahg-goo'-rō, Bagobos of Mount Apo, Mindanao.

Phapitreron amethystina Rosenb.
Amethyst Brown Pigeon.

Lee-mōn', Subanos of Pangpang, on Dumanquilas Bay, Mindanao.

"The specimen of Phapitreron amethystina shot by me in the lowlands of Mindanao (see list of specimens for data) was called 'Lee-mōn' by the Subanos. Its crop contained the fruit of the 'Too-loong' (Subano)."

I collected a specimen at Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906, which is the only one I have met with in the low country. Compare it with those from Malindang and Apo. This is No. 14302. Lee-mōn', Subanos of Pangpang, Dumanquilas Bay, southern Mindanao, August 17, 1906. Its crop contained the fruit of 'Too-loong' (Subano).

Those shot near Camp Goodfellow, at 6000 feet altitude on Mount Apo, Mindanao, in June and July, 1904, had their crops more or less filled with the waxy berries of the tree myrtle, called Boo-ee kah'-yuh by Bagobos.

(Sheet 1.)

Lee-mo'-kuhn, Bagobos of Mount Apo, Mindanao.

(Phabotreron [illegible] [illegible].

Short-billed Brown Pigeon.

Small "brown Pigeons", supposed to be this species, were seen at Malabang, S. Mindanao, Oct. 7 to 9, 1903.

Noted at Bulding, between Parang and Lake Butig, Mindanao, October 1 and 2, 1903.

Two were seen on the Buluan River, connecting lakes Buluan and Liguasan, May 21, 1904; others were seen on the trail from Buluan to Simpitan, May 23 to 26, 1904. Not abundant.

Inbay River, northern Mindanao. — April 22, 1904: "Small sepia-brown Doves" were noted.

One of these Pigeons was shot at Mercedes, 9 miles east of Zamboanga, March 17, 1906, by George T. Langhorne, 11th Cavalry, U.S.A.

[illegible]

Noted in the South Coast Range, between Parang and Lake Butig, October, 1903.

Lake Mainit, northeastern Mindanao, April 24, 1904.

Numerous on the trail from Baganga to Christian Ade's hemp plantation, 7 m. W. of Baganga, April 26, 1904.

Ade's plantation to the River, eastern Mindanao, April 27, 1904.

(Sheet II.)

Phabotreron brevirostris Ingersoll.

In a Mandayan house at Candoos, in the East Coast Range of Mindanao, I saw in a wicker cage the sacred bird of the Mandaya people — the present species. The fateful voice of this little brown pigeon exerts a powerful influence upon the destinies of the Mandayans.

Observed along the Baccoo River from near its source in the west ~~side~~ slope of the East Coast Range of Mindanao to the Mandayan village of Singali at the mouth of an affluent of the same name.

One was shot on the sandy shore of the Agusan River, about 10 miles below Compostela, Mindanao, May 5, 1904, by Colonel Harbord. We were so hungry that it was demanded for the pot, and I had no opportunity of skinning it.

Noted at Dativa, Agusan River, Mindanao, May 6 and 7, 1904.

Dativa to Patrocino, Agusan River, Mindanao, May 7, 1904.

Bulut Island, Surangani group, October 8, 1906. One shot by Captain Halstead Dorey, apparently this species.

Burongo, Catubig River, north Samar, October 1, 1906.

Jolo to Maimbun, Bud Dajo, Crater Lake and Siet Lake, Sulu Island, March 1 and 2, 1906.

(Sheet III.)

Phapitreron brevirostris Ruwerddale.

Abundant at Todaya, on the west shore of the Gulf of Davao, southern Mindanao, June 14, 1904, when I collected a mated pair (Nos. 13500, ♂ ad., and 13501, ♀ ad.). This is the sacred bird of the Mandayas, and ~~I think~~ also of the Bagobos: "Little sacred Dove abundant at Tagulaya; pair sat side-by-side when shot at once."

Davao, southern Mindanao, July 19, 1904.

(Sheet I.)

Phapitreron brunneiceps Bourns and Worcester.

Isabella, Basilan Island, January 26, 1906.

No. 13933 was shot, February 1, 1906, between Camp No. 5 and the Cumalarang River, Basilan Island

Camp No. 6 to Camp No. 7 (near Tipo Tipo, in the interior of Basilan Island, February 2, 1906; No. 13935, ♀ ad., collected Near Tipu Tipu, interior of Basilan Island, February 3, 1906

Camp No 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906

Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906.

Henry Musser's plantation, 2 miles west of Isabella, Basilan Island, February 22, 1906.

I saw a good many of these pigeons, sometimes ~~usually~~ in thickets at the forest edges or in old plantations covered by second growth; but very often they were in the gloomy depths of the heavy forests of the interior

There are 3 species of Phapitreron on the Island of Basilan. I collected the two smaller species (about the size of brevirostris); and McGregor got the larger one (about the size of amethystinus).

(Sheet I.)

Phapitreron

Between Isabella and Musser's ranch, on the Island of Basilan, January 28, 1906, I noted a small pigeon of this genus having spots of white on it.

Several seen, January 30, 1906, near Camp No. 4, Basilan Island (N.W. corner).

Noted in northwest Basilan, between Camp No. 4 and Camp No. 5, January 31, 1906

Isabella to Camp No. 1, interior of Basilan, Feb. 13, 1906.

Camp No. 7 to Camp No. 8, northwest Basilan, February 20, 1906; No. 13969 collected.

Camp No. 8 to Camp No. 9 (Musser's place), north Basilan, Feb. 21, 1906.

Only seen in northwestern Basilan, where it is not as common as Phapitreron brunneiceps; but I saw a good many of these pigeons, usually in thickets at the forest edges or in old plantations covered by second-growth trees. Some were seen at Mr. Henry Musser's residence, 2 miles west of Isabella, north Basilan, February 22, 1906.

(Sheet I.)

Leucotreron,

18. ~~Ptilopus~~ occipitalis (Bonaparte ex G. R. Gray).

Tee-boor-oang', Bagobos of Mount Apo, Mindanao.

(Sheet I.)

Leucotreron Clancheri (Bonaparte).

Several were seen in cages in the town of Santo Domingo de Basco, Batan Island, May 27, 1907. The ~~first~~ second officer of the Mindanao brought two of them aboard the ship May 28, 1907. Iris dark red. Bill yellow with a spot of red on side of mandible at base. Feet purplish red, with purplish brown claws. Eyering plumbeous. Front half of head gray-green. Point of chin black. Plumage of entire upperparts, including wings and tail, grass green. Under tail-coverts buff. Thighs striped as in Osmotreron. Breast with the characteristic generic mark of blackish. Underparts grayish green mixed with whitish in median area.

Two living specimens of this pigeon were brought aboard the ship in a cage by the second officer, who refused to part with them.

Some were seen on San Antonio Bay, near the Moro village of Bona Bona, east Palawan, October 17, 1906, when specimen No. 14448, ♀ ad., was collected. Iris cherry red. Bill yellow, red on sides of mandible at base. Feet vinaceous; claws plumbeous.

Gee'-sow (Philippine name of [illegible]). (Sheet I.)

Ptilopus Philotreron bangueyensis (A.H. Keyes).
Bangey Fruit-Pigeon.

Feb. 25, 1904, Gee'-sow, Visayans of Zamboanga.
On the island of Cagayan Sulu, in the Sulu Sea, I tried to shoot two green-and-red Doves at once, but only got the female (No. 13371). They were cooing softly in a cotton tree in the yard of a Moro house. Towards evening I ~~[illegible]~~ came to a mangrove swamp, where I heard the cooing of many of these birds. February 26, a pair of them cooed softly in bamboo beside a Moro house. Both shot with "aux." (Nos. 13383 and 13384).

General Leonard Wood shot one of these beautiful Fruit-Pigeons at Zamboanga, but, as I was absent, it was not preserved.

Mr. Henry Musser shot one at his place 4 miles east of Isabella, on the Island of Basilan, March 11, 1906.

Leonard Wood, jr., shot one at Zamboanga, in March, 1906.

I saw and heard many of them along streams near Zamboanga, in April, 1906.

Near Isabella, Basilan Island, January 27, 1906.

(Sheet I.)

Muscadivorus

23. ~~Carpophaga~~ aenea (Linnaeus).

Torcasa (Spanish). Green Imperial Pigeon.

Boo-oon' (Moros of Lake Lanao). Nos. 12970-71, [illegible]

Paloma de Casa (Spanish and Viscayans of Mindanao).

Bal-lude' (Moros of Zamboanga).

Numerous on the lowest part of the Rio Grande of Mindanao.

Quite numerous on the island of Sulu, P. I., November 12-26, 1903. Noted at Lake Lake; Hacienda Bandence; Kampong (Barulas residence); plentiful on Crater Mountain and surrounding buttes, where its surprisingly loud notes were heard from November 15 to 18, 1903, especially about sunset; plentiful on Mt. Sulieman, November 19 and 20.

Abundant on the Cabasaran River, southern Mindanao, where some were shot, January 30, 1904, also feeding in large flocks about the residence of Datto Hasim, 6 miles inland and two miles from the river.

Noted at Camp Overton, Mindanao, P. I., November 9, 1904.

Abundant, February 16, 1904, on two rivers that enter Sarangani Bay, northern Mindanao, at the Subano village of Mucas. Two were shot.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Noted along the road from Malaibong to Camp Vicars, March 31, 1904.

Pinnacinomus aenea (Linnaeus). Green-headed Pigeon. (Sheet II.)

23 Carpophaga aenea (Linnaeus).

Many were seen on the island of Sulu, P. I., between Datto Upa's market at Bual and his residence, February 21, 1904. One was shot. This large Pigeon tumbles in the air in the manner of a "Tumbler" Pigeon, or, perhaps, more like a Falcon descending upon its prey, uttering a loud ~~sound~~ booming as it descends in its descent.

October 2, 1903, on the Ambal and Bangaman rivers, north of Parang, Mindanao, these Pigeons were numerous.

Captain Frank R. McCoy, 3d Cavalry, A. D. C., in a journey from Lake Buluan to Davao, saw a "great many" of these Pigeons in the Clip River Valley, southern Mindanao, in May, 1904, and on the Davao side of the divide in early June.

Noted at Kudarangan, on the Rio Grande, Mindanao, March 6, 1904.

Noted on the Tamaca River at Galanan, April 6, 1904.

Observed along the road between Camp Vicars and Malabang, April 11, 1904.

Noted at Isabella, Basilan, January 19, 1904.

Large flocks were seen feeding on the fruits of tall trees, on the wagon-road from Camp Vicars to Malaling Falls, Mindanao, September 29, 1903; and a few were seen later in the day, between Malaling Falls and Malabang.

Noted in abundance from Parang, Mindanao to the summit of the ~~East~~ South coast mountains at Cararao Pass, Sept. 30 to Oct. 4, 1903.

(Sheet III.)

23. Muscadivora aenea (Linnaeus).

Green Imperial Pigeon. "Torcasa"

Numbers were feeding on fruits of tall trees between Matalinig and Camp Severn, on the Vicars-Malalang wagon-road, October 6, 1903.

One was observed as it flew over Lake Liguasan, Mindanao, May 18, 1904 (no others noted May 17-19).

Some of these Pigeons were seen on the Buluan River, connecting lakes Buluan and Liguasan, Mindanao, May 21, 1904.

At ~~Cu~~ the Malala River, on the trail from Buluan to Simpitan, Mindanao, May 23, 1904, flocks were seen. Between the Malala and Numbawata rivers, on the trail from Buluan to Simpitan, Mindanao, May 24, 1904, many were seen; also noted at Simpitan, May 24 and 25, 1904.

Noted at Baenag, Mindanao, April 21, 1904.

Two seen at Surigao, northeastern Mindanao, April 21, 1904.

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

Many were brought to me for the table, at Zamboanga, during February & March, and April 6, 1906.

In April, 1906, I gave 4, from Basilan Id., to the Zoo. at Zamboanga, Mindanao.

Abundant at Pantar, Mind., Aug. & Sept., 1903

Abundant at Labas, in the Pikangan Valley, east of Cotabato, in southern Mindanao, March 12 and 13, 1904.

23. Muscadivora aenea (Linnaeus).

Madalum and Banganan River, South Coast Range, Mindanao, September 30 to October 3, 1903.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

Lake Mainit, northern Mindanao, April 24, 1904.

One was shot at the crossing of the Baganga River, on the east ~~coast~~ coast of Mindanao, April 26, 1904. Abundant on the lower Baganga River.

Abundant, sometimes in large flocks, on the trail from Baganga to Christian Aid's hemp plan=tation, 7 miles west of Baganga, April 26, 1904.

"Myriads" of these large Pigeons were noted between Aide's plantation and the River, eastern Mindanao, April 27, 1904.

On April 28, 1904, we left the River at 5:30 A.M. and arrived at a Manangan village at 11 A.M. During this arduous march through the primeval forest of the interior of Mindanao very few bird notes were heard, and I was only able to identify this Pigeon and the Great Mindanao Hornbill, both of which were abundant.

Noted on the upper Agusan River, at Butalagan, eastern Mindanao, May 2 and 3, 1904.

abundant; 4 shot and eaten.

(Sheet V.)

Muscadivores cœrea (Linnaeus).

Abundant on the Bacoca River, a tributary of the Agusan, near Compostela, Mindanao, May 4, 19 ; also abundant at Singali on the lower Bacoca River, and thence to Compostela, May 4 and 5, 1904.

Abundant, May 5, 1904, on the Agusan River from Compostela to Pilar, Mindanao

Many flocks on the Agusan River from Pilar to Jativa, Mindanao, May 6, 1904; especially numerous at the mouth of the Libuton River at Jativa I shot 4 for the table.

Abundant on the Agusan from Jativa to Patrocinio, May 7, 1904.

Abundant at Varicella, on the Agusan River, Mindanao, May 7 and 8, 1904.

Numerous on Lake Linao, middle Agusan Valley, Mindanao, May 8 and 9, 1904.

"Many" noted, on the Agusan River from Lake Linao to Talacogon, May 9, 1904.

Abundant from Talacogon to the mouth of the Libang River, Agusan Valley, Mindanao, May 10, 1904. Capt. McCoy shot one.

Agusan or Butuan River, below Butuan, Mindanao, May 11, 1904.

Two Spaniards brought in a number to Tabaco, Albay Province, Luzon, March 29, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Baler, east coast of Luzon, June 2, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Lower Subaan River, Mindoro, Nov. 2, 1906. abundant; 4 shot and eaten.

(Sheet VI)

Balaod, Boholano natives of Bucas Id.

Muscadivorus aenea (Linnaeus).

One, at ~~Buscay~~ Lanang, east Samar, Oct. 3, 1906.

I shot one on Bucas Island, October 4, 1906, when many were seen. Local name Balaod.

On the lower Cateel River, east Mindanao, Oct. 5, 1906, a few were seen; and Dr. Paul C. Freer shot 2. // Manay, east Mindanao, Oct. 6, 1906.

Several shot on Mamuk Manka Island, January ~~to~~ 7, 1906.

Dibutu town, west coast of Dibutu Island, January 6, 1906.

Baluk Baluk Island, January 10, 1906.

Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, Sulu Island, March 1 and 2, 1906.

~~Thru~~ Four were shot on Malanipa Island, in the Celebes Sea off south Mindanao, April 1, 1906.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 16, 1906.

Cabo Island, Igat Bay, off south Mindanao, April 2, 1906.

Hatima Island, Dumanquilas Bay, off S. Mindanao, April 2, 1906.

Torcasa (tor-cass'-ah), Filipinos of Zamboanga, fide Estrellas.

In Malampaya Sound, off ~~east~~ west Palawan, Torcasas were seen flying from islet to islet and one was shot, September 12, 1906.

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Tagulaya, west shore of Gulf of Davao, S. Mindanao, June 14, 1904; abundant; 4 shot and eaten.

Musseadivorus aenea (Linnaeus).

♂ Bode, Moros of Basilan Island

Torcasa, Filipinos of Basilan Island.

Balut Island, Sarangani group, Jan. 23 and Oct. 8, 1906.

Near Isabella, Basilan Island, January 26, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

Tipo Tipo to Camp No. 8, interior of Basilan Island, February 3, 1906.

Camp No. 8 to Ta Mitan, Basilan Island, February 4, 1906.

Isabella to Camp No. 1, interior of Basilan, February 13, 1906

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.

Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906

At Tipu Tipu, Interior of Basilan Island, February 15, 1906.

Two shot 2 miles south of Tipu Tipu, Basilan Id., Feb. 16, 1906

Quite numerous, locally, between Camp No. 3 (near Tipu Tipu) and Camp No. 4, on the Buli Buli River, south Basilan, February 16, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906, when specimen No. 13959 was collected.

Abundant in vicinity of Malusa, west Mindoro, February 19, 1906.

Camp No. 7 to Camp No. 8, interior of west Basilan, February 20, 1906.

Camp No. ~~7~~ 8 to Camp No. ~~8~~ 9, north Basilan, February 21, 1906.

Abundant near Mr. Henry Musser's residence, two miles west of Isabella, Basilan Island, Febr. 22, 1906.

Lower Catubig River, Burengo, near Catubig, north Samar; specimen shot by Major General Leonard Wood, near Catubig, all October 1, 1906.

♂ ad., was collected; also No. 14478, ♂ ad.

12 and 13. (Sheet I.)

Muscadivora

25. ~~Carpophaga~~ pickeringi Cassin.

Pickering's Fruit-Pigeon.

Also:

Muscadivora langhornei Mearns.

Langhorne's Fruit-Pigeon.

I have seen this large and delicious Table bird on East Bolod Island (between Sulu and Mindanao), West Bolod Island, and on Cagayan Sulu Island.

Exceedingly numerous on West Bolod Island, Sulu Sea, between Jolo and Zamboanga, P. I., February 21, 1904, when fifteen were shot for specimens and for the table. We found them to be excellent table birds. On March 20, 1904 General Wood ~~afterwards~~ visited East Bolod Island, sometimes called Eagle Rock, and found the Pigeon shooting even better than on West Bolod, obtaining 80 birds, all large Pigeons and the majority of this species. Many of these Pigeons had the throat stained yellowish brown by the fruits they had eaten.

Common on the island of Cagayan Sulu, P. I., February 25 and 26, 1904, when Captain Langhorne shot two one of which (No. 13387) was preserved.

Dammi Island, Sulu Sea, January 4, 1905. Seen by me, several by Senor Estrellas.

6 shot on Loran Island, off Ubian Island, October 12, 1906. Many seen in low tree growth. I shot two - No. 14416, ♂ ad., was collected; also No. 14418, ♂ ad.

(Sheet II.)

Muscadivorex pickeringii Cassin.
Muscadivorex longhornei Mearns

January 21, 1906. — Landed on Palmas Island at 3 P.M. and remained until 6 P.M. Started at once, accompanied by a half dozen very ardent natives of the island, for the hill, where I began shooting large fruit-eating pigeons similar to Muscadivorex longhornei. The entire party brought in 60 of them. General Wood got a dozen with a small-calibre rifle, and I 25 with shotgun. The pigeons were very tame, but strong birds. When shot, quite frequently they would cling ~~head down~~ to the branches, head down, for some ~~time~~ moments before falling. Their note was a loud booming sound.

Specimens obtained: —

13888 ♂ad.	Palmas Isl., Jan. 21, 1906.	430; 750; 240; 160; 20; 34; 49.	
13889 ♂ad.	do	420; 735; 240; 156; 20; 32; 46.	
13890 ♀ad.	do	Egg 15 mm. in diameter.	
13891 ♀ad.	do		

The above 4 specimens, and two more set aside for skinning but subsequently thrown away, had the soft parts colored as follows: Bill pale bluish gray at tip, darker plumbeous at base. Iris red. Eyelids and feet, vinaceous. Bare space surrounding eye pale plumbeous. Claws dusky purplish gray.

(Sheet VI.)

Muscadivores aenea (Linnaeus).

Kah-poor', Bagobos of Mount Apo, Mindanao.

From Tagulaya to an altitude of 1030 feet on Mount Apo, southern Mindanao, June 15, 1904; one shot above Tloncabling at 1900 feet altitude where a number seen. Talicud Island, in the Gulf of Davao, Mindanao, July 17, 1904. Davao, southern Mindanao, July 19, 1904.

(Sheet I.)

Muscadivores ~~occipitalis~~ michalis (Cabanis).

Abundant on Tuga Island, May 29 and 30, 1907. ~~20~~ 22 were shot by our party. Some were feeding on fruit in patches of scrub only a few feet from the ground. Notes three or more deep, hollow, owl-like hoots and a deep guttural growl. Compare the 2 specimens preserved with topotypes in the U. S. National Museum.

This very large pigeon produces an enormous, booming sound. Naujan River and Naujan Lake, Mindoro, March 25, 1907.

Lower Dubaan River, Mindoro, Nov. 2, and Dec. 5, 1906.

Dubaan, eastern Mindoro, December 6, 1906.

Calapan, eastern Mindoro, December 8 and 9, 1906.

Specimen: No. 145168. ♂ ad. Dubaan, eastern Mindoro, Dec. 6, 1906.

[illegible] [illegible] sp. n.

[illegible]

On August 24, 1903, I found a pair in the forest near Pantar, altitude 1800 feet, Mindanao, P.I., and shot the female (No. 12938). [illegible] This and those of Mount Malindang, Mindanao, were prob=ably the new species (Philocolpa [illegible] described by [illegible] from Mount Apo, Mindanao.

Several were seen in the oak and cedar wood below the summit of Mount Pauto Tomas, Luzon, Dec. 10, 1905. At Haight's-in-the-oaks, near Benguet, Luzon, Mr. Haight has seen one, during a residence of 5 years.

(Sheet I.)

Ptilinopus poliocephala - (Hartlaub).

Doon-dwo'-ni (Filipinos of Zamboanga).

Noted in Mindoro, March 25, 1907, on the trail from Naujan to Lake and River Naujan.

No. 13945. ♀ad. One of several (I saw two) shot by a party of soldiers, from Zamboanga, in the mountains of the western peninsula of Mindanao, February 5, 1906. The men had 5 days hunting pass, and got 22 pigeons of all kinds. Captain Frederick V. Krüg, 20th Infantry, U.S. Army, sent for me to see three pigeons that had been sent him by the men of his company. Two were this species and one an example of Columba griseigularis. My specimen of Ptilinopus measured: 420; 190; 220; 155; 23; 29; 45. Iris orange; eyelid, and bare space around eye, vinaceous; bill all dark plumbeous; feet crimson; claws grayish brown. The bird had been eviscerated, filled with salt, and packed in a soldier's knapsack.

(Sheet I.)

Ptilinopus mindorensis (Whitehead).

One pair at 3300 feet, on spur of Mount Halcon, Mindoro, Nov. 12, 1906. (Above Mangyan clearing, near Camp No. 4.)

Whitehead's band-tailed fruit pigeon.—One seen at Camp No. 6, altitude 6300 feet, Mount Halcon, Mindoro, November 20, 1906. I was visiting traps in the rain, and had no gun.

(Sheet I.)

29. *Myristicivora bicolor* (Scopoli).
Nutmeg Pigeon; Pied Imperial Pigeon.

First seen on the island of Sulu, P. I., November 15, 1903, on the trail from Upa's place to Crater Mountain.

No. 13134. ♀ad. Near Crater Lake, Sulu Island, P. I., November 18, 1903. Iris dark hazel. Bare skin around eye plumbeous. Bill pale bluish gray tipped with [illegible]. Feet bluish gray; claws plumbeous-black, with under surface of toes stained with wood color.

General Wood found many of these large Pigeons in the forested funnel surrounding Crater Lake, at the summit of Crater Mountain; many were seen about Mt. Suliman. Two were seen at Taglibi, November 21, 1903. Several were seen in the hills behind Jolo, November 22 to 26, 1903.

A good many were seen between Datto Upa's residence and his marketplace at Bual, Sulu Island, P. I., February 21, 1904.

Very abundant on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, P. I., February 21, 1904. On March 20, 1904, General Wood and his staff shot eighty Pigeons on East Bolod Island (sometimes called Castle Rock), all but two belonging to this species and *Carpophaga pickeringi*.

(Sheet II.)

29. Myristicivora bicolor (Scopoli). Nutmeg Pigeon.

Shot from the island of Siassi, P. I., in 1903–'04, by Captain T. L. Smith, 17th Infantry, U.S. Army. Aug. 17, 1904, I saw a native woman land at Manila, P. I., with a living Pigeon of this kind, but did not find out where it came from.

Elias H. Porter, Contract Surgeon, U.S. Army, informed me, Sept. 29, 1905, that he has seen this bird on the Island of Mindoro; also in much larger numbers on a small detached island.

Dr. H. N. Kierulff and Capt. George T. Langhorne shot 12 on Fatima Id., Iguit Bay, P. I. (off S. Mindanao), April 2, 1906. I skinned No. 14037 for Miss Langhorne. It contained a full-sized egg.

In April, 1906, I presented 12 to the Zoo. at Zamboanga. They were caught with bird lime made with fresh rubber at a drinking pool on the Island of Basilan. Sent me by Teakle.

Calapan, eastern Mindoro, December 9, 1906.
Balut Island, Sarangani group, January 23, 1906.
Tipu Tipu, interior of Basilan Island, February 15, 1906.
Common and generally distributed on Sulu Island, from Jolo to Bud Dajo Peak, October 11, 1906.

[illegible] appear [illegible]

(Sheet III.)

Myristicivora bicolor (Scopoli).

4 Nutmeg Pigeons were shot by our party on Loran Island, off Ubian Island, October 12, 1906.

Very abundant and gentle around the shores of three lakes in Cagayan Sulu Island, October 15, 1906, when Mr. Horace Fletcher shot some for our ship's mess.

Some were shot on Manuk Manka Island, Jan. 6, 1906. Sibutu town, west coast of Sibutu Island, January 7, 1906, when some were shot and a male specimen preserved.

One seen on East Bolod Island, Sulu Sea, January 10, 1906.

Numerous on Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Malanipa Island, off S. Mindanao, April 1, 1906.

Cabo Island, Igat Bay, off S. Mindanao, April 2, 1906.

Talinia Island, Dumanquilas Bay, off S. Mindanao, April 2, 1906.

Cah-mass'-oh, Filipinos of Zamboanga, fide Estrellas.

Many were seen on the shores and islets of Malampaya Sound, ~~east~~ West Palawan, September 12, 1906, when 2 were shot. One was in first plumage: Pattern like adult, with less black on outer tail-feather. Back and wings faintly washed with gray.

In passing through Halstead Strait, among the islands of the Calamianes Group, Sept. 13, 1906, many were seen on trees and flying about the islands. usually appear singly or in pairs.

(Sheet I.)

Columba griseigularis (Walden and Sharpe).
Gray-throated Wood-Pigeon.

One at Baler, east coast of Luzon, June 2, 1907

I have shot the bird on West Bolod Island, between Jolo and Zamboanga. General Leonard Wood and others killed them on East Bolod Island, in the Sulu Sea.

We found many of these beautiful bronzy Pigeons on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, P.I., February 21, 1904. We obtained 38 specimens. On March 20, 1904 ~~a later day~~, General Wood and the officers of his staff obtained ~~some~~ two of these Pigeons on East Bolod Island (sometimes called Castle Rock), within view of West Bolod. A total bag of eighty (80) Pigeons was made, ~~all but two~~ seventy-eight being Carpophaga pickeringi and Myristicivora bicolor.

(At Haight's-in-the-cave, northern Benguet, Luzon, Mr. Haight has found it rare in the dry season (November to May) and more abundant during the rainy season (June to October) for six years past. Mr. Haight shot one ~~one~~ for my collection on July 25, 190~~8~~7. He has killed a number of them for food, though never more than two in one day, as they usually appear singly or in pairs.

Bē-low'-ogg, Moros of Basilan Id. (Sheet 11.)

Columba griseigularis (Walden and Layard)

Thirteen (13) of these beautiful pigeons were brought aboard the Mindanao alive, in cages, from Santo Domingo de Basco, Island of Batan, P. I., May 27 and 28, 1907. One of these I afterwards preserved at Manila.

Camp No. 3, ridge at 2250 feet, Mindoro, Nov. 8-12, 1906.

Between Camp No. 2 and No. 3, Mindoro, Nov. 8, 1906. Scarce. Flies with tremendous noise from treetop to treetop.

Quite common at Camp No. 5, altitude 4500 feet, Mount Halcon, Mindoro, November 13-17, 1906.

Quite common at Camp No. 6, altitude 6300 feet, Mount Halcon, Mindoro, Nov. 17-22, 1906. Several shot for food. When their wings are wet they flutter from treetop to treetop with a roar like a landslide. It was feeding upon large fruits of an undescribed species of Diplycosia, a shrub pseudoepiphytic on mossy trees. A fruit, size 15 x 25 millimeters, is preserved in throat of bird preserved in alcohol (No. 14496, Bad.).

Flock of 3 noted near Camp No. 4, northwest Basilan Island, January 30, 1906.

No. 13930 collected near Camp No. 4, northwestern Basilan, January 31, 1906. The Basilan Moros called it "Bilanag" (Bē-low'-ogg).

(Sheet III.)

Columba griseigularis (Walden and Layard).

One was shot by General Wood on Doran Island (off Ubian Island), October 12, 1906.

A specimen, No number, ♀, from Batan Island, was left in the Bureau of Science, on loan.

(Sheet I.)

31. Macropygia Lemirostris ~~G. R. Gray~~ Bonaparte.
~~Slender-billed Cuckoo~~ - Ore.

Sar-rah-pooh'-yahn, Bagobos of ~~Tagula~~ Todaya, on Mt. Apo.
Man-kah-hew'-ee, Bagobos of Tagulaya on the Gulf of Davao.
Some were seen along the Buldan River, above Lake Liguasan, Mindanao, at at the Moro village of Buluan, near Lake Buluan it was quite numerous, May 20 to 23, 1904.
Abundant at Cotabato, Mindanao, in August & September.
Noted at Baganga, eastern Mindanao, P. I., October 2[illegible]
One pair ~~Numerous~~ at Makar, on Sarangani Bay, southern Mindanao, October 26, 1903.
West side of Lake Lanao, Mindanao, November 2, 1903.
Some were seen on Mt. Sulriman, Sulu Island, November 20, 1903.
Seen at Zamboanga, Mindanao, P. I., December 2, 1903.
In a list of seventeen species of birds found on the island of ~~Diassugi~~ Diassi (MS.), Captain J. L. Smith, 17th Infantry, U. S. Army, mention is made of a "wild pigeon that is brown tinged with green" which probably refers to this species.
Noted at Kudarangan, on the Rio Grande, Mindanao, March 6, 1904.
Noted from Camp Vicars to Sauir, and at Sonya, on Lake Lanao, Mindanao, April 2, 1904.
Again seen at Sauir, April 9 and 13, 1904.
Seen near Camp Marahui, Mindanao, September 27, 1903.
Some were seen September 29, 1903, between Camp Vicars and Matalung Falls, Mindanao.

Macropygia tenuirostris Bonaparte.
Slender-billed Cuckoo-Dove.

On the trail from Buluan to Simpitan, Mindanao, soon after leaving the Buluan River, May 23, 1904, many Cuckoo-Doves were seen in the timber which borders the tributary streams. Between the Malala and Numbawata rivers, on this trail, a great number of these Doves were seen; and it was quite numerous at Simpitan, May 24 and 25, 1904.

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

Estrellos shot one April 6, 1906, at Zamboanga.

" " " " 20, " "

Very abundant at Cailan & L. Lanao, Aug. & Sept., 1903.

Common where trees grew ~~in the~~ from the Deranaya Marsh to ~~Lake~~ Labas, in the Libungan River Basin, east of Cotabato, southern Mindanao, March 12 and 13, 1904.

Parang to Buliq Lakes, across South Coast Range, Mindanao, September 30 to October 6, 1903.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904

Baganga to Christian Cides hemp plantation 7 miles west of Baganga, eastern Mindanao, April 26, 1904

Noted on the Bacoco River, a tributary of the Agusan River, eastern Mindanao, May 4, 1904.

Macrohyggia tenuirostris Bonaparte.

Noted on the Agusan River above the mouth of the Libuton River, May 6, 1904.

Patro~~ano~~cino to Varicella, on the Agusan River Mind. May 7, 1904.

Pozorrubro to Twin Peaks, Luzon, Nov. 30, 1905.

Several Jenisperre seen along the road from Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Dingras to Padsan, do " 16, " ; about 12 seen, mostly in pairs.

Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

Few, noted in Laoag Valley (below the town of Laoag) do " 20–22, ".

A few between Laoag and Vintar, Ilocos Norte, Luzon " 23 and 24, " and Febr. 5.

Several from Laoag and Paoay Lake, do " 27, 1907.

One at Davila, Ilocos Norte, Luzon, February 15, 1907.

Seen, March 9, 1907, near Bojeador and Davila, Ilocos Norte.

On March 28, 1907, I noted it as "abundant as high as we went (2500 feet altitude)", on the slope of Mount Mayon which faces the town of Legaspi, Albay Province, Luzon, March 28, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 2, 1907.

Common on Mount Mayon, Tabaco, side, up to the upper timber line, June 4 and 5, 1907. Albay Province, Luzon.

One shot, Nov. 13, 1906, at lowest Mangyan house in highest village on our route to the summit of Mount Halcon, Mindoro. Altitude, where specimen was shot, about 3000 feet.

(Sheet IV.)

Macrophygia tenuirostris Bonaparte.

On Basilan Island, between Camp No. 1 (Isabella) and Camp No. 2 (on the coast to the westward), this Cuckoo-Dove was not uncommon, Jan. 28, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Camp No. 2 to Camp No. 3 (Tipu Tipu), Basilan, Feb. 15, 1906; two shot.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Abundant at Mr. Henry Musser's residence, 2 miles west of Isabella, north Basilan, February 22, 1906.

Manay, east Mindanao, October 6, 1906.

Many seen, 1 shot, Loran Island, off Ubian Island, October 12, 1906.

Old Spanish fort at Tatán, Tawi Tawi Island, January 8, 1906.

Captain George Taylor Langhorne, U.S. Army, shot this bird on East Bolod Island, January 10, 1906.

Numerous on Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Common ~~on~~ at Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906, when I shot some.

Cabo Island, Digat Bay, off south Mindanao, April 2, 1906.

Ayala, western Mindanao, August 27, 1906.

At Pangpang, on Dumanquilas Bay, southern Mindanao, Timoy Imbing, Datu of the Dubanos called this bird Kahn-tah-lin'-tahl.

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1906.

(Streptopelia)

32. Turtur dussumieri (Temminck).
Dussumier's Turtle-Dove.

Mah-nah'-tod (Moros of Zamboanga).

Noted at Camp Vicars (3000 ft.), April 1, 1904.
Noted on the trail to Camp Vicars (0–3000 feet), March 31, 1904.
Abundant at Pantar, Marahui, and Cabacanao, March 15, 1904.

Ring Doves were abundant from the mouth of the Rio Grande up to Lake Lanao, October 18, 19, 1903.

Numerous at Malar and Buhi, on Barangani Bay, southern Mindanao, October 26, 1903.

Noted at the Moro village of Maliyam, southern Mindanao, October 25, 1903.

This Dove was found in abundance on the island of Sulu, November 12–26, 1903. It was noted at Siet Lake, Panglima Hassan's place, Crater Mountain, Upas place, on the trail from Upa's casita to Crater Mountain and about the mountain, on Mt. Sulieman. Common along the beach from Taglibi to Jolo, November 21, 1903. Abundant at Jolo, November 21–26, 1903.

Seen at Zamboanga, Mindanao, P. I., December 2, 1903.

Noted on Pangapuyan Island, off Mindanao, about 12 miles east of Zamboanga, December 11, 1903.

Seen on the Cabasaran River, southern Mindanao, Jan. 30, 1904.

18-a

(Sheet I)

Onychopelia humilis (Temminck).

From Currimao to Laoag, Ilocos Norte, Luzon, on January 14, 1907, it was very abundant; usually in pairs; sexx difference in color easily differentiated; many pairs were dusting themselves in the wagon road.

Laoag River, below the town of Laoag, Luzon, January 16, 1907.

Abundant from Laoag to Dingras, many dusting themselves in the road, January 16, 1907.

Very numerous from Dingras to Pudsan, Ilocos Norte Province, Luzon, January 17, 1907.

Dozens of pairs were dusting in the roads from Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

Several pairs seen on shore of Paoay Lake and trail to Laoag, Ilocos Norte Province, Luzon, February 5, 1907.

One on the road, between Laoag and Vintar, February 7, 1907.

On February 15, 1907, when I travelled from Laoag to Nagpartian, Ilocos Norte Province, Luzon, I found this species abundant all the way. Usually in pairs, as many as 6 to 10 were sometimes seen together in the road or in a tree. Some scarcely moved from the road as we drove by, waiting until the buggy was almost upon them.

Abundant in Nagpartian, Ilocos Norte, Luzon, February 15 to March 9, 1907. Usually seen in pairs, often in the streets of the village.

(Sheet 11.)

32. Testudo (Stegotheca) dussumieri (Temminck).

Dussumier's Turtle-Dove.

Found at Jambigan, Jambigan Bay, southern Mindanao, February 1 and 2, 1904.

Numerous at Dipuloy, northern Mindanao, P. I., February 14, 1904, ~~when~~ we shot ~~enough~~ eight for our table.

At Lubungan, northern Mindanao, February 14, 1904.

Noted at Iligan, northern Mindanao, February 15, 1904.

Abundant, one shot, at the Subano village of Sindangan, on Sindangan Bay, northern Mindanao, February 16, 1904; also at Mucas, " " " "

Abundant, two shot, on the island of Sulu, P. I., between Datto Upa's residence and his market at Bual, February 21, 1904.

Listed from the island of Siassi, P. I., in 1903–04, by Captain T. L. Smith, 17th Infantry, U.S.Army.

Noted at Kudarangan, on the Rio Grande, Mindanao, March 6, 1904.

Noted at Camp Vicars (3000 ft.), Mindanao, April 1, 1904.

Noted from Camp Vicars to Sauir, on Lake Lanao, Mindanao, April 3, 1904.

Some were seen April 5, 1904, at Malungan, on the Taraca River, and very many near the rivermouth; noted at Gatauran, on the upper course of the river as less common than on the lower stream, April 6, 1904. A good many were noted at Basayan, Lake Lanao Basin, April 8 and 9, 1904. Noted at Sauir, on Lake Lanao, and thence to Camp Vicars, April 9 and 10, 1904; again at Vicars, April [illegible]

(Streptopelia)
Turtur dussumieri (Temminck).
Dussumier's Turtle-Dove.

~~413. Hypotænidia torquata (Linnæus).~~

A number were seen in the road, between Puntar and Marahui, Mindanao, September 27, 1903.

This Dove was numerous at Camp Vicars (altitude about 2900 feet), September 28 and 29, 1903; and some were seen (one shot) between Camp Vicars and Matalung Falls, September 29, 1903.

Observed at Malatang, S. Mindanao, Oct. 7 to 9, 1903.

Seen at Parang and Buldung, Mindanao, Sept 30 to Oct. 2, 1903.

Noted at Lake Buteg, Mindanao, October 5 and 6, 1903.

Shot at Glan, S. Mindanao, October 26, 1903.

Pairs and small flocks were seen feeding upon floating driftage on Lake Liguasan, Mindanao, May 17, 1904. On the 18th, a flock was seen, feeding on floating vegetation on the lake, and many others were seen during the day. (Numerous May 17 to 19, 1904.)

May 20 and 21, 1904, ~~at Buluan~~, on the Buluan River, Mindanao, this species was noted as abundant; and numbers were seen on the trail from Buluan to Simpitan, May 23 to 26, 1904, especially on the Malola, Num=bawata, and Dim'-my-gall-ee rivers, and at Simpitan.

Many seen, and one shot, at Bacnag, northeastern Mindanao, April 21, 1904.

Turtur (Streptopelia) dussumieri (Temminck).

Dussumier's Turtle-Dove.

One was seen, November 5, 1905, at Cavite, near Manila, P. I.

About 40 were shot by Capt & Mrs Langhorne at Mercedes, Mindanao, P. I., March 28, 1906.

Always abundant at Zamboanga, Mindanao.

Many shot at Ayala, Mindanao, April 24, 1906.

Very abundant at Panitan & L. Lanao, Aug. & Sept., 1903

Noted in abundance from the Deranaya Marsh to Labas, east of Cotabato, southern Mindanao, March 12 and 13, 1904.

Pianga to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

Noted from the Deranaya estero to the mouth of the Rio Grande, Mindanao, March 14, 1904, inclusive.

"One," noted at Varicella, on the Agusan River, Mindanao, May 7, 1908.

Many were seen from a train on the Manila and Dagupan Railroad, between Manila and Camp Gregg (station Bayambang) P. I., July 29 and 30, 1904.

Lieutenant Gordon shot a number at Camp Gregg, Pangasinan Province, Luzon, July 30, 1905.

San Isidro, Nueva Ecija, Luzon, Nov. 27, 1905

Camp Holsenberg, Luzon, November 28, 1905.

(Sheet V.)

Turtur (Streptopelia) dussumieri (Temminck).

Dagupan to Pozorrubeo, Pangasinan, Luzon, Nov. 30, 1905.

Bued River Camp on to Pozorrubeo, Luzon, December 4, 1905.

Camp Gossman, Island of Siquijor, December [illegible].

Abundant on three small, wooded coral islands, off the southern extremity of Sibutu Island, January 5, 1906, when our party shot some of them for food.

Very numerous; many dusting in the road from Currimao to Laoag, Ilocos Norte, Luzon, January 14, 1907.

Laoag River, below the town of Laoag, January 16, 1907.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Abundant from Dingras to Pedsan, Ilocos Norte, Luzon, Jan. 17, 1907.

Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

A few in Laoag Valley below Laoag, do " 20–22, " .

Laoag to Vintar, do " 23 & 24, " .

" " Paoay Lake, do " 27, " .

Abundant, Laoag to " " , do Febr. 5, " .

" " " Nagpartian, do " 15, " .

Abundant at Nagpartian, do Febr. 15 – March 9, " .

Common from Bojeador to Laoag, do March 9, 1907.

A few below Nagilliran, on the trail between Baguio, Benguet and Camp Wallace, La Union, ~~March 19~~ May 20, 1907.

Camp Wallace, La Union Province, Luzon, ~~March~~ May 20 to 25, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Turtur (Streptopelia) dussumieri (Temminck).

Baler, east coast of Luzon, June 2, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Eight were shot by our party on Fuga Island, P. I., May 29 and 30, 1907. Very common.

Mouth of Baco River, and Dubaan, Mindoro, Nov. 1, 1906.

Dubaan and lower Dubaan River, Mindoro, Nov. 2, 1906

Sarangani Island, off southern Mindanao, Jan. 23, 1906.

Basilan Island, between Camps 1 and 2, Jan. 28, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, Jan. 30, 1906.

Camp No. 4 to Camp No. 5, Basilan Island, January 31, 1906.

One shot at Zamboanga, Mindanao, February 11, 1906.

Isabella to Camp No. 1, interior of Basilan, February 13, 1906.

Buli Buli River to Camp No. 5, south Basilan, February 17, 1906.

A few were seen on Sulu Island, between Jolo and Bud Dajo Peak, October 11, 1906.

Many seen, 1 shot, Loran Island, off Ubian Id., Oct. 12, 1906.

Near Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.

Balambing, Tawi Tawi Island, January 6, 1906.

Turtur (Streptopelia) dussumieri (Temminck).

Siasi, January 9, 1906.

Numerous on Dulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Dict Lake, March 1 and 2, 1906.

Camp No. 4, west coast of Basilan, March 3, 1906.

Cotabato, southern Mindanao, March 15, 1906.

Malabang, southern Mindanao, March 15, 1906.

Captains James P. Jervey and George T. Langhorne, U.S. Army, shot some of these birds at Mercedes, 9 m. E. of Zamboanga, southwestern Mindanao, March 16, 1906.

Tabo Island, Igat Bay, off south Mindanao, April 2, 1906.

Ayala, western Mindanao, August 27, 1906.

Cuyo Island, Sulu Sea, September 10, 1906; numerous.

Abundant on the shores and islets of Malampaya Sound, ~~east~~ west Palawan Island, September 12, 1906. They resort to the petty islets of Malampaya Sound at sunset to roost for the night. On a very small islet I were shot at dusk of evening as they came in to roost. Its loud cooing continued until after dark.

At Pumping Station, near Manila, Luzon, September 17, 1906.

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Davao, southern Mindanao, July 19, 1904.

(Sheet II)

Oreopelia humilis (Temminck).

Abundant on all parts of the route from Nagpartian to Laoag, Ilocos Norte, Luzon, March 9, 1907. Its note is a low-pitched, hollow, scraping sound similar to that of some ~~frog~~ frogs.

Geopelia striata (Linnaeus).

Barred Ground-Dove.

At Manila, Luzon, P. I., August 17 to 21, 1904, I often saw them sitting in pairs on the telegraph-wires, or in the grass. They were very gentle.

July 26 to August ~~31~~ 30, 1904. — This pretty Dove is abundant in the City of Manila. Its note is a tremulous baritone cooing. It frequents trees and open grassy places such as courtyards and parks, spending a good deal of time upon the ground. During the month of September it became more numerous, and its cooing was continually heard. It is most abundant on the outskirts of Manila, but is found wherever there are trees and lawns throughout the city.

Cooing in numbers at Manila, November 10, 1905.

Manila, P. I., August 17 to September 15, 1904.

Noted at Manila, July 26-29 and July 31 to Aug 4, 1905

Noted, at intervals, along the Manila and Dagupan Railroad, from Manila to Camp Gregg (station Bayambang) July 29 and 30, 1905.

One was shot (by Lieutenant Gordon) at Camp Gregg, Pangasinan, July 29, 1905.

San Isidro, Nueva Ecija Province, Luzon, November 27, 1905.

Camp Stotsenberg, Luzon, November 28, 1905.

Near Pozorrubio, Pangasinan Province, Luzon, Dec. 14, 1905.

Dagupan to Bayambang, " " " " 15. "

Park and public squares of Manila, January 12, 1907.

(Sheet II.)

Tropelia striata (Linnæus)

Common from Currimao to Laoag, in Ilocos Norte Province, Luzon, January 14, 1907.

Laoag River, below Laoag, January 16, 1907.

Abundant and continually heard on the road from Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Abundant from Dingras to Paásan, Ilocos Norte, " 17.

" " " " Laoag, " " " 18, " .

From the bank of the Laoag River, below Laoag, on January 19, 1907, the plaintive notes of this little dove were always heard in the distance, in tamarind trees and bamboo back from the river.

Common in the Laoag Valley below Laoag, January 20-22, 1907. One female was near ovipositing.

Laoag to Vintar Lake, Ilocos Norte, Luzon, January 23 and 24, 1907.

" " Paoay " , do " 27, " .

" " " " , abundant, do Febr. 5, " .

Common from Laoag to Nagpartian, Ilocos Norte Province, Luzon, February 15, 1907; utters a sad, tremulous cooing.

Abundant at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to March 9, 1907; most numerous in old fields, and weedy yards in the native village.

On March 9, 1907, its plaintive cooing was heard all the way from Nagpartian to Laoag, Ilocos Norte, Luzon.

No. 14726, ♀, was setting on 2 eggs which are preserved. White, immaculate. These measure: 22.5 X 17 and 24 X 17.5 mm.

(Sheet III.)

Geopelia striata (Linnaeus).

Descending by trail from Baguio to Camp Wallace it was not seen until Nagilliang was reached, ~~March~~ May 20, 1907.

Camp Wallace, La Union Province, Luzon, ~~March~~ May 20-25, 1907.

No. 14326, ♂ad., collected at Pumping Station, near Manila, September 17, 1906.

Numerous in the Mariquina Valley around the Manila Pumping Station September 17, 1906; one collected.

Taytay and Antipolo, Rizal Province, Luzon, September 21, 1906.

Governor Bolton found this species abundant, at times, at Davao, Mindanao; but we could find none of them during July, 1904.

~~Chalcophaps indica (Linnaeus).~~
~~Indian Bronze-winged Pigeon Dove.~~

Men-ah'-tod, Bagobos of Mount Apo, Mindanao.

Mindanao, July 15 to 20, 1904.

Noted in large flocks, feeding on the ground, at Davao, southern Mindanao.

Major-General Leonard Wood, U. S. Army, shot a male (No. 13118) at Glan, southern Mindanao, October 26, 1903. I saw no others of this species.

A few were seen at Malabang, S. Mindanao, October 7 to 9, 1903.

Noted at Surigao, northeastern Mindanao, April 21, 1904.

"One very dark green and (maroon?) small Pigeon" was noted, on the Tubay River, northern Mindanao, April 22, 1904.

One was shot at Mercedes, 9 miles east of Zamboanga, March , 1906, by Captain James P. Jervey, engineer corps, U.S. Army

Two were sent me from near Zamboanga, April 3, 1906.

Tibas, east of Cotabato, southern Mindanao, March 12 and 13, 1904.

Dagupan to Pozorrubio, Pangasinan, Luzon, Nov. 30, 1905.

Between the Bued River Canyon and Pozorrubio, Dec. 14, 1905.

Not uncommon from Curriman to Laoag, in the province of Ilocos Norte, Luzon, January 14, 1907.

Some were dusting in the wagon road.

Many dusting in the road, all the way from Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

35. Chalcophaps indica (Linnaeus).
Indian Bronze-winged Dove.

Paoay to Nagpartian, Ilocos Norte, Luzon, February 15, 1907.

Numbers of these pretty doves are snared by the natives, in the vicinity of Bamboanga, where they are often kept alive in cages as pets, or offered for sale in the market.

Listed by Captain F. R. McCoy, 3d Cavalry, U.S.C., from the Alip River Valley, between Lake Buluan and the Gulf of Davao, in , 1904.

Jativa, Agusan River, Mindanao, May 6 and 7, 1904.

Abundant from Dingras to Badsan, Ilocos Norte, Luzon, January 17, 1907; dusting in road; on flies at a distance of 30 feet when approached by a group of horsemen, and immediately drops back into the road.

Abundant, as many as six together, from Dingras to Paoay, Ilocos Norte Province, Luzon, January 18, 1907.

Paoay to Vintar Lake, Ilocos Norte, Luzon, Jan. 23–24, 1907.

" "Paoay " " " " " 27, " .

Abundant on the trail from Paoay to Paoay Lake and near the shores of the lake, February 5, 1907.

(Sheet III.)

Chalcophaps indica (Linnaeus).

The few that were seen at Nagpartian, Ilocos Norte Province, Luzon, from February 15 to March 9, 1907, were in woodland bordering Nagpartian Creek.

Common from Nagpartian to Laoag, Ilocos Norte, March 9, 1907.

On May 30, 1907, Major-General Leonard Wood shot two on Fuga Island, P. I., where it was noted as "common."

Near Malusa, west Basilan, February 19, 1906.

Camp No. 8, northwest Basilan, February 20 and 21, 1906.

Musser's place (Camp No. 9), 2 miles west of Isabella, Basilan Island, February 21 and 22, 1906.

Captains James P. Jervey and George T. Langhorne, U. S. Army, shot some of these birds at Mercedes, 9 m. E. of Zamboanga, southwestern Mindanao, March 16, 1906.

Mahn-ah'-tod, Filipinos of Zamboanga, fide Estrellias.

Bulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

(Sheet III.)

Chalcophaps indica (Linnaeus).

Noted March 25, 1907, on the trail from Naujan to the Naujan River, eastern Mindoro; also on the Naujan River and Lake Naujan, the same day.

Doon-doo'-ni, Filipinos of Zamboanga, fide Estrella.

40. Calœnas nicobarica (Linnæus).

Nicobar Pigeon.

Quite numerous on Balik Balik Island, January 10, 1906.

On the island of Cagayan Sulu, P. I., I bought a caged Nicobar Pigeon from a Moro. I do not know that this bird was taken on Cagayan Sulu, as the man from whom I purchased it told me that a small island off Cagayan Sulu held a great many of them. From others I learned that, on an island five leagues distant from Cagayan Sulu, Nicobar Pigeons are abundant.

Frequently kept in captivity. Two were in the Manila Zoölogical Park, August 17, 1905.

One was seen in the forest near Camp No. 8 and the north coast of Basilan Island, February 3, 1906. My attention was attracted by the falling fruit which it detached from a tree; and, presently it flew out with a loud flapping into another tree. Taraing (our Jucan guide) called it Toag-sak-i; but I think that native name is usually applied to another bird.

On Tumindao Island, off Sitanki, October 13, 1906 a good many were flushed from the ground. Flew like a hen, and alighted 20 to 30 feet ahead in thick tree growth. 4 were shot, all young birds, with no white. Some seen had white tails. Specimen: No. 14420, ♂ juv.

21-a

(Sheet I.)

White or Whitish Pigeon, smaller than Myristicivora bicolor (Scopoli), was noted February 25, 1904, by Capt. Langhorne, U.S. Army., in crossing the island of Cagayan Sulu. Senor Mariano de Lion, Presidente of the island of Cagayan Sulu, also informed me that "white Pigeons" were found on the island.

Senor Mariano de Lion, Presidente of the island of Cagayan Sulu, had seen four species of Pigeons on the island. One, three were seen by us.

44. *Rallina eurizonoides* (Lafresnaye).

Jolo, Sulu Island, P. I., November 21-26, 1903. It was sometimes flushed from the grass on the plains.

(Sheet I.)

Poliolimnas cinerea (Vieillot).

Vieillot's Rail.

Kah'-kee-kah-see'-lah (Moro of Zamboanga).

Noted at Sowlog, Mindanao, in aug. & Sept., 1903.

Noted on Lake Lanao, in August & September, 1903.

Hundreds of small Rails, probably mostly of this species, were seen on Lake Liguasan, and several along the marshy banks of the Rio Grande, Mindanao, October 19, 1903.

Numerous in the marshes and ricefields of Zamboanga, Mindanao, P. I., December 2, 1903.

Small Rails were numerous in the marshes at Iligan, northern Mindanao, February 15, 1904.

Noted at Cottabato, Rio Grande Valley, Mindanao, March 3-5, 1904.

"Little dark Rails" noted at Kudarangan, on the Rio Grande, " " 6, " "

"A small, dusky Rail" was noted at Malabang, March 31, 1904.

Noted from Dowir to Rogayan, on Lake Lanao, April 3, 1904.

A few were noted on the Taraca River between Galanan and Basayan, April 8, 1904.

Some were seen at Lake Butig, south of Lake Lanao, Mindanao, October 5 & 6, 1903.

Exceedingly numerous on Lake Liguasan, Mindanao, May 17, 1904, cackling with the Waterhens everywhere in the grass. They are quiet during midday, turning up towards sunset

Poliolimnas cinereus (Vieillot).
Viellot's Rail.

Abundant on Lake Liguasan, Mindanao, May 18, 1904. Called Tee-cling' by the Visayan Filipinos of Zamboanga, and Ahm-pat' (or Ahm-pot') by the Moros of the Rio Grande Valley and by ~~the~~ the Malays. May 19: "The beds of vegetation on Lake Liguasan are the homes of myriads of these Rails. (Abundant May 17 to 19, 1904.) Also abundant on the Buluan River, May 20 and 21, 1904. Numbers were seen, May 21 to 23, 1904, running along the riverbank, at Buluan, amid patches of lotus and smartweed. Its ordinary call note is skitt-yoo, skitt-yoo. When alarmed it becomes Skee-e, skee-e; re-turning down the Buluan River, from Buluan to Pandog, May 27, 1904, this species was seen in great abundance.

Abundant in a marshy fresh-water pond, at Surigao, northeastern Mindanao, April 20 and 21, 1904.

Ayala, Mindanao, P. I., April 24, 1906.

Libungan River Valley, east of Cotabato, southern Mindanao, March 12 and 13, 1904.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

Common on the Tubay River, April 22-24, 1904.

Lake Mainit, northern Mindanao, April 24, 1904.

Tubay River, between Jabanga and Santiago, N. Mind., Apr. 24, 1904.

(Sheet III.)

Poliolimnas cinereus (Vieillot).

"Little brown rail with green legs" noted on the Agusan River, Mindanao, near Varioella, [illegible] 8, 1905.

Abundant on the large lakes of the middle Agusan Valley, Mindanao, May 8 and 9, 19[illegible]

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Stotsenberg " , " " " 28, "

Near Pozorrubeo, Pangasinan Province, Luzon, Nov. 30, 1905.

Curzimao to Laoag, Ilocos Norte, Luzon, January 14, 1907.

Lower Laoag River, Ilocos Norte, Luzon, January 16, 1907 and Febr. 5, "

Laoag River and Paoay Lake, do " 27, "

very abundant around Paoay Lake.

Bacara, Ilocos Norte Province, Luzon, February 15, 1907.

Nagpartian, do Feb. 15 to March 9, "

common on the streams from Nagpartian to Laoag, March 9, 1907.

Aparri, northern Luzon, May 29, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Abundant on Naujan Lake and Naujan River, eastern Mindoro, March 25, 1907.

Isabella, Basilan Island, January 27, 1906

One shot at Zamboanga, Mindanao, February 11, 1906.

Malusa, west Basilan, February 19, 1906.

(Sheet IV.)

Poliolimnas cinereus (Vieillot).

Camp No. 8, northwest Basilan, Feb. 20 and 21, 1906.
Camp No 9, at Musser's plantation, 2 miles west of Isabella, Basilan Island, February 21 and 22, 1906.
Very abundant at (Dorey's Camp 4, Jan. 30, 31, 1906), west coast of Basilan, March 3, 1906. One collected, Malabang, southern Mindanao, March 15, 1906.

(Sheet I.)

Amaurornis olivacea (Meyen).

On on the slope of Mount Mayon, Legaspi side, at 15 00 feet altitude, Albay Province, Luzon, March 28, 1907.
Siatu, Siasi Island, January 9, 1906.
Pumping Station, near Manila, Luzon, September 17, 1906.

Amaurornis (Porzana — Forster).

White-breasted Water-hen or Crake.

Bing-ko-moug' (Moros of Lake Lanao). No. 12926 ♂ ad.

Bal-le-quack' (Filipinos of Cagayan Sulu).

Priangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

A specimen of Amaurornis (Porzanica?), No. 13150, ♂ ad., was shot at Jolo, Sulu, P. I., November 26, 1903. Several others were seen there from November 21-26, 1903.

I shot one at Zamboanga, Mindanao, Dec. 2, 1903.

One shot (No. 13364 ♀ ad.) February 25, 1904, in a small tree on the island of Cagayan Sulu, Sulu Sea, P. I. Several were seen and heard in a nipa swamp. ~~Later~~ Later in the day, a large grassy basin containing a pond was examined, and many of these birds were found there. (One specimen (No. 13391 ♂ ad.) was preserved from there.)

Seen at Mlao. ~~Several~~ Noted at Basayan (near Ragayan), Lake Lanao, April 8, 1904. ~~Noted at Sauir on Lake Lanao, April 13, 1904 — among the grassy shore.~~ ~~Several seen on dry, grassy hills around Vicars (3000 ft.), April 1, 1904. One shot. Many had been shot by officers of Vicars for the table.~~

Some flew up from the edge of the road, between Pantar and Marahui, Mindanao, September 27, 1903.

Seen on Lake Liguasan, Mindanao, May 17 to 19, 1904.

Seen at Surigao, northeastern Mindanao, April 21, 1904.

(Sheet II.)

Amaurornis phoenicura (Forster).

A few were seen on Lake Mainit and the Tubay River, April 22-24, 1904. Usually seen on pebbly shores, running into the tall grass and vines when alarmed.

This species should stand:

Amaurornis phoenicura (Pennant).

Gallinula phoenicurus Pennant, Indian Zoology, 1769, p. 10, pl. IX.

Naujan River, eastern Mindoro, March 25, 1907.

One shot at Zamboanga, Mindanao, February 11, 1906.

Near Isabella, Basilan Island, February 13, 1906.

Malusa, west Mindoro, February 19, 1906.

Camp No. 4 (Dorey's Jan. 30, 31, 1906), west coast of Basilan Island, March 3, 1906.

(Sheet I.)

52. Gallinula chloropus (Linnaeus).
Waterhen; Moorhen.
J-r-r-ruck (Moros of Lake Lanao). No. 129562

The Waterhen is abundant on the Island of Guam.
Waterhens were seen in abundance on Lake Li=
=guasan, Rio Grande Valley, Mindanao, Oct. 13, 1903.
North side of Lake Lanao, Mindanao, November 3, 1903.
One seen at Zamboanga, " , December 2, 1903.
On the Cabasaran River, southern Mindanao, January 30, 1904.
Rio Grande at Cotabato, southern Mindanao, March 3 to 5, 1904.
[illegible] abundant on Lake Lanao in Aug. & Sept., 1
Abundant at Sauir, on Lake Lanao, Mindanao, April 2, 1904.
Noted from Sauir, on Lake Lanao, to Rogayan, in the Taraca Valley, April 3, 1904.
Numbers were seen and some shot on Taraca River from
Malungan to the rivermouth, April 5, 1904.
A few were noted at Basayan, near Lake Lanao, Mindanao, April 8, 1904.
Shot for food by General Wood & Capt. McCoy, at Sauir, on Lake Lanao,
April 9 and 10, 1904. They were abundant and tame; often alighted on the
rank grass, or stood up upon the floating water-cabbage.
Captain Francis P. Diviter, 28th Infantry, U.S. Army, shot
a number of these birds, on Lake Lanao, Mindanao, P.I.,
September 27, 1903. They proved to be good food.

(Sheet 11.)

52. Gallinula chloropus (Linnaeus).
Waterhen; Moorhen.

Many were seen along the margin of Lake Lanao, Mindanao, September 27, 1903.

Abundant, several shot, at Lake Butig, south of Lake Lanao, Mindanao, October 5 and 6, 1903; also noted at Datto Grande's place, between Lake Butig and Vicars, Mindanao, Oct. 6, 1903.

Very abundant on Lake Liguasan, Mindanao, May 17, 1904. These birds are heard cackling on every side during the early morning; but, during the heat of the day, the Rail family is not much in evidence, but times towards the sunset horn and cackles and clucks increasingly until dark, the present species contributing its full share of sounds. May 19, 1904: It rises with much fluttering, and ~~May~~ alights in grass, bushes, and trees, emitting noisy cackles, especially at evening and during the nights. May 18: The Waterhens are innumerable on the lake, and are very attractive birds. They are noisy cackleers; to them I attributed many of the strange sounds which issued from the marsh vegetation. We also found the Waterhen abundant on the Buluan River, con=necting lakes Buluan and Liguasan, May 20 and 21, 1904. Its notes are about the same as those of the American Florida Gallinule. Abundant on the Buluan River and Lake Buluan, Mindanao, May 22, 1904. It was

(Sheet III.)

Gallinula chloropus (Linnaeus).

Waterhen; Moorhen.

again noted in abundance, when descending the Buluan River, from Buluan to Lake Liguasan, May 27, 1904.

Quite numerous on the Tubay River, northern Mindanao, April 22 and 23, 1904.

Ayala, Mindanao, P. I., April 24, 1906.

Pinugs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

Rio Grande at mouth of estero which drains the Serasaya Marsh, March 14, 1904.

Some were shot on Lake Mainit, northeastern Mindanao, April 24, 1904; also on the Tubay River, between Dabanga and Santiego the same day. Abundant on the Tubay River and Lake Mainit, April 22-24, 1904.

In descending the Agusan River, Mindanao, none were seen until Varicella was reached. It was very abundant on Lake ~~Ko~~ Linao, Agusan Valley, May 8 and 9, 1904, where the Visayans call it Valanaobig. One was shot on Lake Linao.

"Abundant and very noisy," from Lake Linao to Sala=cogon, Agusan River, Mindanao, May 9, 1904.

One shot, many seen, at Jimenez, northern Mindanao, May 12, 1904.

(Sheet IV.)

Gallinula chloropus (Linnaeus).

Many were seen along the Manila and Dagupan Railroad, between Manila and Camp Gregg, July 29 and 30, 1905.

Several were seen on Trinidad Lake, altitude about 4500 feet, in Benguet Province, Luzon, Dec. 3, 1905.

Ponds between Currimao and Laoag, in the province of Ilocos Norte, Luzon, January 14, 1907.

Abundant, six shot, on Vintar Lake, Ilocos Norte, Jan. 24, 1907.

Hundreds on Paoay Lake, Ilocos Norte, Luzon, January 27 and Febr. 5, 1907.

One on a slough of the river at Nagpartian, Ilocos Norte Pr., Luzon, February 17, 1907.

A young were seen with their parents, on Trinidad Lake, Benguet Province, Luzon, on May 6, 1907.

(Dorry's camp 4, Jan. 30, 31, 1906), west coast of Basilan Island, March 3, 1906.

(Sheet 7.)

53. Gallirex cinerea (~~G. inclin~~).

Kora or Water-cock.

Kahr'-rong (Moros of Zamboanga).

, during August and Sept., 1903.

Noted at Malabang, southern Mindanao, March 31, 1904.

Several were seen in dry, grassy hills around Uriars (3000 ft.), April 1, 1904. One shot (No. 13430). Many had been shot by officers of Uriars for the table.

From camp Uriars to Sonir, ~~along~~ near the edge of Lake Lanao, April 2, 1904.

Noted from Sonir on Lake Lanao to Rogayan in the Taraca Valley, April 3, 1904.

Again observed at Rogayan, April 4, 1904.

A number were seen along the Taraca River from Malungan to the rivermouth, April 5, 1904.

Many were seen at Basayan, near Lake Lanao, April 8, 1904.

One or two were flushed from the marsh in front of Sonir, on Lake Lanao, April 10, 1904.

Several seen at Lake Butig, south of L. Lanao, Mindanao, October 5 and 6, 1903.

Noted at Malabang, S. Mindanao, October 7 to 9, 1903.

Some were seen on Lake Liguasan, Mindanao, May 17 to 19, 1904. May ~~15~~ 19: The Water-~~hens~~ cocks are ~~inconsiderable and are very attractive birds~~ scarce and about on the lake, preferring drier ground.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904. Noted on the Rio Grande from the mouth of the Peranaya estero to the rivermouth, March 14, 1904.

(Sheet II.)

Gallirex cinerea Latham.

One shot at Jimanez, northern Mindanao, May 12, 1904.
Pili Hot Springs, near Sibi, southeastern Luzon, June [illegible]

54. Porphyrio pulverulentus Temminck.
Philippine Purple Moorhen or Gallinule.

These noisy birds infested the Seranaya Marsh, between Barak and Port Seranaya, and were often seen flying at evening, March 8–11, 1904.

One seen at Zamboanga, Mindanao, P. I., Dec. 2, 1903.

Eight of these beautiful birds were seen in the aviary of Captain Coffin, U.S. Navy, at the Pollok Naval Station and Dry Dock, Mindanao, P. I., March 2, 1904. A Moro offered one for sale at Pollok the same day.

Not seen on Lake Lanao by me before April 5, 1904, when it was found in some numbers on the lowest portion of the Taraca River.

Two ~~One~~ are seen in the Zoölogical Gardens, Manila, Aug. ~~15~~ 17, 1905.

May 17, 1904. Lake Lequasan, Mindanao. — Many seen. May 18: The Purple Gallinules are innumerable, and are very attractive birds. May 19: "The Purple Gallinule occurs on Lake Lequasan in vast numbers. It rises with much fluttering and alights in grass, bushes, vines, and trees. It is a noisy cackler."

In descending the Buluan River, from Buluan to Pandog, May 27, it was again noted.

Some were shot on Lake Mainit, northeastern Mindanao, April 24, 1904; also on the Tubay River, from Yabanga to Santiago, the same day.

21 (Sheet II.)

Porphyrio pulverulentus Temminck.

Very abundant and noisy on the large lakes of the middle Agusan Valley; where one was shot on Lake Linao, Mindanao, May 8, 1904.

"Abundant and very noisy", from Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904.

General Wood shot one, and my Ilocano boy shot one. Found in abundance on Lake Naujan and the Naujan River, eastern Mindoro, March 25, 1907. A very noisy bird that usually keeps out of sight in the tall grass.

Captains James P. Jervey and George T. Langhorne, U.S. Army, shot some of these birds at Mercedes, southwestern Mindanao, March 16, 1906.

Colymbus

55. Podicipes philippinensis (Bonnaterre).
Philippine Grebe or Dabchick.
Oon'-dong (Moros of Zamboanga).

When I visited Lake Buluan, Mindanao, May 22, 1904, I saw no Grebe.

When I visited Lake Liguasan, October 19, 1903, I saw no Grebes.

Noted on Lake Lanao, November 2, 1903.
" " north side " " 3, " .

Captain Frank R. McCoy shot me a specimen on April 9 and General Wood another April 10, 1904, at Sauir, on Lake Lanao. A number of these Grebes were there at that time.

Contract Surgeon John Hicks, U.S.A. and Captain Francis P. Siviter, 28th Infty, shot some of these Grebes on Lake Lanao, Mindanao, Sept. 27, 1903.

Several were seen on Lake Liguasan, Mindanao, May 17, 1904, frequenting open places among the numerous islands of floating grass, etc. On May 18, I noted: "One Grebe seen close to the boat. Record of yesterday doubtless correct." May 19: "Grebes, by hundreds, are seen in shallow, weedy parts of the lake, and are very tame. I think I saw a floating nest with both parent Grebes near it.

(Sheet II.)

Colymbus philippinensis (Bonnaterre).

Two were seen on Trinidad Lake, altitude about 4500 feet altitude, Benguet Province, Luzon, Dec. 3, 1905.
Abundant, 2 shot, on Vintar Lake, Ilocos Norte, Luzon, Jan. 24, 1907 and Feb. 5, 1907.
Very numerous on Paoay Lake, do " " 1907.

29 and 30 (Sheet 1.)

Tah'-la Tah'-la (Moros of Zamboanga).

Hydrochelidon hybrida (Pallas).

White-winged Tern.

[Possibly the Zamboanga or Sulu, River Terns were: Hydrochelidon leucoptera (Meisner and Schinz). White-winged Black Tern.]

Whitish Terns, apparently of this genus were seen in great numbers feeding over the rice-fields and marshes flanking Zamboanga, Mindanao, October 10–16, 1903. One that I shot fell in a field of rankly-growing rice where I could not find it.

Many whitish Terns were seen on the Rio Grande, Mindanao, from the river mouth up to Lake Lejnasan, October 19, 1903. They had mottled, black-and-white crowns, and, on the lake, perched on coarse grass.

No Gulls or Terns were seen in Lake Lanao Basin April 1 to 10, 1904.

Lake Lejnasan, Mindanao, May 17, 1904. — Hydrochelidon hybrida appears to be breeding here. Bodies black, wings white. The Terns we saw on the Tubay River, Mindanao, were evidently not this species, but, perhaps H. leucoptera or a Sterna. On entering a large open space among the grassy islands of the lake, a great many H. hybrida were seen and two shot. The

Hydrochelidon hybrida (Pallas) and
" leucoptera (Meisner and Schinz).

Ken-ah'-way (Visayan Filipinos of Zamboanga).

H. hybrida often alights on the grass, where their nests may be. "The Terns (almost white) I used to see on the marshes of Zamboanga, Mindanao, were dowitcher like those recently seen on the Tubay River, Mindanao, and not H. hybrida."

Lake Lequasan, Mindanao, May 18, 1904.—Hydrochelidon hybrida assembled on some senna bushes growing in the water, and made considerable noise. I saw one bird fly to another on a bush and drop a fish into its beak. All had blackish bellies. [The stomach of a bird shot contained many small fishes. Two larger, whitish Terns flew over the lake uttering loud harsh cries. These were smaller than Sterna bergii boreotis Bangs.]

May 19: Hydrochelidon hybrida is seen everywhere on Lake Lequasan, and commonly alights on bushes.

Hydrochelidon hybrida was abundant on the Buluan River from Lake Lequasan to L. Buluan, May 20 to 22, 1904. On the 21st I also noted "a larger Tern with pure white breast", and, later in the day "plenty of White Terns, not the largest (Sterna bergii boreotis Bangs) species."

Some Hydrochelidons ~~seen~~ (young?) seen, May 22, 1904, on the Buluan River between Lake Buluan and the Moro village of the same name had white bellies. Comparatively few of these were seen.

Hydrochelidon hybrida (Pallas) and
" leucoptera (Meisner and Schinz).

Hydrochelidon hybrida was abundant on Lake Buhuan, Mindanao, May 22, 1904. On May 27, between Pandog and Lake Ligiasan, a flock of 10, one, only, having white underparts, passed over the vinta in which I travelled.

A flock of Terns, all white below, numbering about a dozen, flew over Fort William McKinley, Sept. 23, 1905. They were about the size of Sterna hirundo.

During October, 1905, these Terns were abun=dant on the Pasig River and Laguna de Bay, Luzon. They fly over the marshes and along the shores dropping suddenly upon their prey.

One flock seen at sea off the N.W. coast of Luzon, near Aparri, May 26, 1907. Apparently this species.

Many were seen about off the mouth of the Cagayan River, northern Luzon, May 26, 1907. Probably this species.

Aparri, northern Luzon, May 29, 1907.

Chaplain Joseph Clemens collected it on Lake Lanao, Mindanao.

bergii borealis Bangs.

59. Sterna ~~bergii~~ Lichtensteinii.

Large Crested Tern.

On August 9, 1903, flocks of these Terns were seen on the Sulu Sea, off the north shore of Mindanao, between Zamboanga and Dapitan.

About 60 were noted at Mati, southeastern Mindanao, October 23, 1903.

Noted at the mouth of the Rio Grande, Mindanao, October 19, 1903.

Noted at Davao, on the Gulf of Davao, southern Mindanao, October 24, 1903.

On the Celebes Sea, between Zamboanga and Malabang, Mindanao, many of these Terns were seen, October 31 and November 1, 1903.

Seen off Malabang, southern Mindanao, November 1 1903.

Seen off Sulu Island, November ~~21-22~~ 12-24, 1903.

When sailing between Jolo, Sulu Island and Papa Island, P. I., November 25, 1903, flocks of these Terns were seen feeding on schools of fish that our skipper said were "Spanish mackerel."

Dungdung Island, off Sulu, P. I., November 25, 1903.

On Pata " " " " " ,

a pair was shot for the collection by General Wood. Abundant.

59. Sterna bergii ~~Lichtenstein~~.

Many were perched on the stakes of a Moro fish wier at Pangapayan Island off Mindanao about 12 miles east of Zamboanga, February 2, 1904.

Noted at Bung Bung; also a flock at the mouth of the Cabasaran River, southern Mindanao, Jan. 30, 1904.

Noted off Buluan, southern Mindanao, January 31, 1904.

Mouth of Cabasaran River, southern " " "

Banga Island (Port Banga), southern Mindanao, February 1, 1904.

Fishing in flocks off the island of Siassay, P. I., February 4, 1904, although none were seen off Sulu at that time.

Flocks of ~~beautiful~~ Terns pursuing ~~the breaking~~ schools of fish that broke the surface of the Sulu Sea, between ~~Sulu~~ Jolo and Zamboanga, February 6, 1904, with a background of beautiful cloud effects at dawn made a picture to be forever remembered. When a good-sized fish was caught the Tern would float on the water until it was eaten.

On the Sulu Sea off northwestern Mindanao, February 13, 1904, flocks of these Terns were following schools of "Spanish mackerel."

At Dipulog, Northern Mindanao, P. I., February 14, 1904, many were settled upon a sandbar near the shore.

59. Sterna bergii Lichtenstein.

Off the shore of Sulu Island, P. I., February 20 and 21, 1904, large flocks were following schools of "horse mackerel."

Seen in the Sulu Sea, off Mindanao, enroute from Zamboanga to Cagayan Sulu, February 23, 1904; again saw many flocks feeding on "horse mackerel;" returning, February 27, many others were noted.

Found at the island of Siassi, P. I., by both Captain T. L. Smith, 17th Infantry, U.S. Army and myself.

Noted at the Pollok Naval Station, southern Mindanao, March 2, 1904.

Noted at Isabella, Island of Basilan, and also a large flock off the east end of Santa Cruz Island, Jan. 19, 1904.

April 19, 1904.— Left Zamboanga for Surigao, Mindanao, at 9 P.M. yesterday. During to-day a few large Terns have been seen off the north coast of Mindanao.

April 20, 1904.— Saw a few Large Crested Terns between sunrise and 11 o'clock, A.M., when we anchored at Surigao, Mindanao.

Enormous flocks of these birds were seen about sand-bars off the mouth of the Agusan River, April 22, 1904, shortly before the great hurricane of 1904, which occurred on the afternoon of April 23, 1904. Many seen on the Tubay River on afternoon of April 22, 1904.

Seen on Manila Bay, October 21, 1905.

Sterna bergii boreotis Bangs
Large Crested Tern.

March 25 to 27, 1906. — On trip to Jolo, Sulu, many were seen on the Sulu Sea. At night some roosted on drifting timber near Sulu Id.

Many were seen on Igat Bay, S. Mindanao, April 2, 1906.

As we entered the bay at Margosa Tubig, April 2, 1906, large flocks were noted.

When shipwrecked in a small vinta in Zamboanga-Basilan Strait, Mr. Henry Musser was attacked in the water by hundreds of these birds, and painfully hurt by their sharp bills. They seemed to aim their blows at his eyes; and not until he covered his eyes with his arm and remained quiet on the bit of driftage to which he clung did the cease their attacks.

An immense flock feeding off the banks connecting the Santa Cruz Islands April 11, 1906. Probably the same flock that attacked Mr. Musser.

Off Ayala, Mindanao, P. I., April 24, 1906.

Flocks were noted in the Sulu Sea, off N. Mindanao, between Zamboanga and Iligan, Aug 8-10, 1903.

Off Butuan to Misamis, N. Mindanao, May 11 and 12, 1904.

Misamis to Camp Overton, off N. Mindanao, May 12, 1904.

Off N. Mindanao, from Camp Overton to Balingao, May 13, 1904.

(Sheet V.)

Sterna bergii borealis Bangs.

From Dapitan to Zamboanga, off northwestern Mindanao, May 14, 1904, some were often seen ~~drifting~~ floating on drifage

East of Formosa, September 17, 1904, I noted "one Sterna bergii borealis, the only bird seen since leaving Manila."

As we entered San Bernardino Straits, on July 25, 1905, two were seen floating on drifage.

Iloilo to Overton, December 25, 1905

A few off Dammi Island, in the Sulu Sea, January 4, 1906

Abundant on the coral reefs surrounding three small ~~islets~~ wooded islets lying off the south end of Bibutu Island, January 5, 1906, when a trick was played on a member of the party who ate a tern under the belief that it was a snipe.

Many were noted in Manila Bay, Jan. 12, 1907.

Burrinao, Ilocos Norte Province, Luzon, January 14, 1907.

From Mariveles anchorage, along the west coast of Luzon, December 22 and 23, a good many were seen, usually in flocks, following schools of fish.

Camp Wallace, La Union Province, Luzon, ~~March~~ May 20-25, 1907.

Abundant off the west coast of Luzon, between Bojeador and Aparri, May 26, 1907.

Abundant off the mouth of the Cagayan River at Aparri, Luzon, May 26 and 29, 1907.

(Sheet VI.)

Sterna bergii borealis Bangs.

As we steamed down the east coast of Luzon from Finga Island, May 31, 1907, some of these terns were seen.

Off Baler, east coast of Luzon, June 2, 1907.

Many noted off Corregador Island, at the entrance to Manila Bay, March 24, 1907.

Calapan, Mindoro, ~~Nov~~ October 30 and Nov. 1, 1906.

Calapan to Subaan, Mindoro, Nov. 1, 1906, when hundreds were seen on fish wier stakes at the mouth of the Baco River.

Gulf of Davao, Mindanao, January 22, 1906.

Balut Island, Sarangani group, January 23, 1906.

Straits of Basilan, between the Sulu and Celebes seas, January 26, 1906.

Off Basilan Island, between camps 1 and 2, January 28, 1906.

A score of these birds were perched upon the stakes of a Moro fish trap, in Northwest Basilan, between Camps 3 and 4, January 30, 1906.

Off mouth of La Mutan River, north Basilan, Feb. 4, 1906.

Off the beach between Camp No. 8 and Camp No. 9 (Musser's plantation), north Basilan, Feb. 21, 1906.

Isabella, Basilan to Zamboanga, Mindanao (Basilan Straits), February 22, 1906.

(Sheet VII.)

Sterna bergii boreotis Bangs.

Off N. E. Samar, October 2, 1906.

A few off the rivermouth at Lanang, east Samar, October 3, 1906.

Immense flocks noted in Surigao Straits, October 4, 1906.

Bucas Island, off N. E. Mindanao, October 4, 1906.

En route from the Sarangani Islands to Zamboanga, in the Celebes Sea, October 9, 1906, many were seen.

Abundant at Loran Id., off Ubian Id., October 12, 1906.

Sumindao Island, off Sitanki Island, October 13, 1906.

Many noted in the harbor of Sandakan, Borneo, October 14, 1906.

Flocks seen on the Sulu Sea, off the east coast of Palawan Island, October 18, 1906.

Manila Bay, December 16, 1906.

Balambing, on Tawi Tawi Island; also in flocks from Bongao to Balambing, January 6, 1906.

Many off Manuk Manka Island, January 6, 1906.

Sibutu Town, west coast of Sibutu Island, January 7, 1906.

Tatán, Tawi Tawi Island, January 8, 1906.

Simaluc Island, off Tawi Tawi Island, January 8, 1906.

Off northeast Tawi Tawi Island, January 8, 1906.

Siatu, Siasi Island, January 9, 1906.

Sterna bergii borotis Bangs.

Jolo, Sulu Island, January 9, 1906.

Baluk Baluk Island, January 10, 1906.

Jolo, Sulu Island, March 1, 1906.

Siet Lake Beach, Sulu Island, March 2, 1906

Zamboanga to Jolo, on the Sulu Sea, March 8, 1906.

(near Dorey's Camp 4, Jan. 30, 31, 1906), west coast of Basilan Island, March 3, 1906.

Celebes Sea, off south Mindanao, between Zamboanga and Margosatubig, March 13, 1906; between Malabang and Parang Parang, March 14, 1906; at Parang Parang, Mindanao, March 14, 1906; between Parang Parang and Cotabato, March 14, 1906; on this voyage it was very frequently seen floating on driftage, and it was noted than a large percentage was of immature birds.

At mouth of Rio Grande, southern Mindanao, March 15, 1906.

Abundant on the Celebes Sea, between Malabang and Zamboanga, off south Mindanao, March ~~15~~ 16, 1906.

On entering Dumanquilas Bay, southern Min=
=danao, April 2, 1906, large flock were seen.

Many seen at the entrance to Dumanquilas Bay, southern Mindanao, August 16, 1906.

Dumanquilas Bay, southern Mindanao, August 17, 1906.

In flocks, on the Sulu Sea between Mindanao and Cebu islands, September 1 and 2, 1906.

4. *Sterna bergii borealis* Bangs.

Mactan Island, off E. Cebu Island, September 3, 1906.

Flying in numbers about the harbor of Manila, September 8, 1906. ~~picking up food about the decks and slipping as fearlessly as the Japanese Kites of Nagasaki~~. Marivelez, Bataan Province, Luzon, Sept. 8-9, 1906.

Off E. Mindoro, September 9, 1906.

Sulu Sea, north of Cuyo Island, September 10, 1906.

Specimen taken on Cuyo Island, Sulu Sea, September 10, 1906.

Large flocks frequented rocks in Malampaya Sound, off ~~east~~ northwest Palawan, September 12, 1906. The specimen preserved was killed owing with a 22-calibre rifle by Mr. Horace Fletcher.

In passing through Hulsead Strait, among the islands of the Calamianes group, flocks were seen on September 13, 1906.

During the afternoon of June 10, 1904, on the Celebes Sea off S. Mindanao, flocks appeared.

One off Zamboanga, Mindanao, July 26, 1904.

Noted off Tucuran, southern Mindanao, Oct. 14, 1903.

No terns were seen between Zamboanga and Samar, July 8-12, 1906, except one of this species off Calbayog (= Camp Connell) July 12, 1906; none seen between Samar and Manila, July 12 to 18, 1906; but several *Sterna bergii* were

(Sheet X.)

Sterna bergii borealis Bangs

noted at Mariveles, Luzon, July 19, 1906.

A good many were seen, flying and floating on logs, in the Sulu Sea off northwestern Mindanao, May 6, 1906.

(Sheet I.)

61. Sterna fuliginosa Gmelin.
Sooty Tern.

On July 23, 1903, two days out from Guam going towards Manila, several Sooty Terns were seen.

On a sandbar near the beach at Dipulog, northern Mindanao, P. I., February 14, 1904, a flock of about 100 dark Terns, together with a few white ones (Sterna bergii ?) was noted.

One dead and spoiled (partially eaten by some animal), was found on the bank of the Tubay River, April 24, 1904.

Flocks were seen off the east coast of Mindanao, between Surigao and Baganga, April 25 and 26, 1904.

Many were seen on the Celebes Sea, off south Mindanao, October 9, 1906.

Off east shore of Sulu Island, March 2, 1906.

In steaming through Halstead Straits, among the numerous islands of the Calamianes group, September 13, 1906, one lone individual and two large flocks were noted.

(Sheet I.)

Sterna

Great flocks of Terns about the size and color of Sterna hirundo were seen alighting on sand=bars off the mouth of the Butuan or Agusan River, northern Mindanao, April 22, 1904. On the same day and on April 23, while ascend=ing the Tubay River, before and during a severe tropical hurricane, many of these Terns, in flocks of 100 to 200 were seen. They were most abundant just below the native village of Dantiego, on April 23. "The pearl-gray color of the mantle is obsolete."

As we entered San Bernardino Straits, on July 25, 1905, several small whitish terns were noted.

Terns, small white (perhaps sinensis) were seen off the mouth of the Cagayan River, at Aparri, northern Luzon, May 29, 1907.

Sterna, small white, seen, steaming down the east coast of Luzon, from Fuga Island, May 31, 1907. Also off Baler, east coast of Luzon, [illegible]

(Sheet II.)

Sterna

Immense flocks of Terns the size of Sterna hirundo were noted in Surigao Straits, Oct. 4, 1906.

Note.— The two species of small Terns which I shot, in company with General Tasker H. Bliss, in Basilan Straits, were probably the following:-

Sterna fluviatilis (larger).

Sterna melanauchen Temminck (the smaller, with rose-tinted breast).

Sterna fluviatilis.— "A few" noted on Malampaya Sound, off ~~east~~ west Palawan, September 12, 1906.

In passing through the intricate channels of Halstead Straits, among the islands of the Cala=mianes group, September 13, 1906, flock of this tern were observed.

(Sheet 1.)

Tell-la-tell'-la, Moros of Zamboanga.
One noted off Iloilo, Panay Island, July 23, 1906.
Sterna ~~minuta~~ ~~L.~~ ~~sinensis~~ Gmelin.
~~Chinese Least~~ Tern; ~~[illegible]~~

Bahs-bahs (=accent), Bagobos of Santa Cruz, Gulf of Davao.
Kan-ah'-wy, Visayan Filipinos of Davao, Mindanao.
Eg-tik-sah-Idah'-got, Bagobos of Todaya, on Mount Apo, Mindanao.

Shot two least terns on the Gulf of Davao, Mindanao, P. I., June , 1904; also saw many small terns about the entrance to Nagasaki Harbor, Japan, September , 1904, which may have been this species.

Very numerous along the Manila breakwater October 20 and 21, 1905.

Seen in flocks off Iloilo, Island of Panay, December 24, 1905.

Seen in flocks off Camp Jossman, Island of Guimaras, December 24, 1905.

Off Puerto-Princesa, east Palawan, I saw a flock over a school of fish on September 11, 1906.

On June 14, 1904, I shot two on the Gulf of Davao, southern Mindanao (N.W. side of Gulf, in front of Dumoy). Nos. 13496 and 13497, adult males.

No. 13496. ♂ad. 222; 530; 178; 68; —; 18; 19.

No. 13497. ♂ad. 225; 536; 180; 66; 30; 18; 19.5.

In both: Iris dark brown. Bill olive-brown, black at tip, horn color at extreme point. Legs and feet olive-brown; claws black; underside of ~~toes~~ yellow. Both stomachs contain fishes an inch in length (stomach preserved). Not near their breeding season. The only ones seen.

(Sheet I.)

Larus ridibundus Linnaeus.
Laughing Gull; Black-headed Gull.

No Gulls or Terns were seen in Lake Lanao Basin, April [illegible] 1903. Noted on the Rio Grande, Mindanao, from the rivermouth to Lake Liguasan, October 19, 1903. Several Gulls were seen sailing over Sindangan Bay, northern Mindanao, P. I., February 16, 1904; and I picked up the dry remains of one (No. 13) on the beach, at the Subano village of Sindangan, the same day, of which the head and wing were kept.

As we steamed out of the Pasig River into Manila Bay, January 12, 1904 flocks were flying about the shipping; and farther out in the bay were a great many long-crested terns.

Abundant off the mouth of the Cagayan River at Aparri, Luzon, May 26, 1907.

One at Aparri, northern Luzon, May 29, 1907.

"Hundreds" noted in Manila Bay, Luzon, March 20, 1907.

Manila Bay, December 16, 1906.

2 seen off Tucuran, in the Celebes Sea, off south Mindanao, October 14, 1903.

68. Arenaria interpres (Linnaeus).

Turnstone. Common on Tumindao Island, off Sitankai Id., Oct. 13, 1906, when 2 were shot. One adult had numerous red feathers on upper parts.

One shot by Captain Halstead Dorey, October 12, 1906, on Doran Island, off Ubian Island. No. 14409, ♂ ad.

Bucas Island, off N.E. Mindanao, October 11, 1906.

About 20 were seen at Mati, southeastern Mindanao, Oct. 3 1903.

Large flocks of Turnstones were seen at Davao, at the head of the Gulf of Davao, southern Mindanao, Oct. 13-24, 1903. One [illegible].

On the shore and muddy flats bordering Saranggani Bay, at Makar and Bula, southern Mindanao, October 26, 1903. Turnstones were numerous.

Several Turnstones were seen along the beach between Taglibi and Galo, November 21, 1903. Galo, Davao, November 21-26, 1903.

Noted at Iligan, northern Mindanao, Febr. 15, 1904.

Doubtfully identified at Malalang, S. Mindanao, Oct. 7-9, 1903.

Baganga, eastern Mindanao, April 26, 1904.

A flock was seen on Calicagan Island, off north Samar, Oct. 2, 1906, when No. 14344 was shot by General Wood, who brought in four of them.

Lanang, east Samar, October 3, 1906.

Cotcot, east Mindanao, October 5, 1906.

(Sheet 11.)

Arenaria interpres (Linnaeus).

Leonard Wood, Jr. shot one on Simaluc Island, off Tawi Tawi Island, January 8, 1906.

Bialu, Siasi Island, January 9, 1906.

East Bolod Island, Sulu Sea, January 10, 1906.

Balut Balut Island, January 10, 1906.

(Sheet I.)

Squatarola helvetica (Linnaeus).

Quite a large number were found, in large mixed flocks of shore birds, on three small coral islands off the southern extremity of Jolo Island, January 5, 1906. General Wood shot some of them.

One shot on Loran Island (off Ubian Island), October 12, 1906; No. 14407, ♀ ad., shot by General Wood. This specimen is enormously larger than a male from Virginia in the Bureau of Science collection.

Sylvia (Linnæus).

70. Charadrius dominicus P. L. S. Müller.
Pacific Golden Plover; Oriental Golden Plover.

On the shore and muddy flats bordering Daranganí Bay, southern Mindanao, at Makar and Glan, Golden Plovers were abundant on October 26, 1903, when General Wood's party shot enough of them to supply the table.

General Wood's party shot some of these birds for the table, at Glan, southern Mindanao, October 26, 1903.

Abundant at Jolo, Sulu, November 21–26, 1903, when some were shot to supply our table.

A large flock seen (2 shot) at Zamboanga, Mindanao, P. I., December 2, 1903.

Two flocks seen, 3 birds shot, near the salt works at Zamboanga, Mindanao, P. I., February 11, 1904.

Flocks were seen on the island of Sulu, P. I., between Datto Ufa's residence and his market at Bual, February 21, 1904.

Flocks were noted, in the Tamaca Valley, between Galauan and Bazayan, Mindanao, April 8, 1904.

A good many were seen and some shot at Glan, southern Mindanao, October 26, 1903.

(Sheet II.)

Charadrius dominicus fulvus (Gmelin).

Pacific Golden Plover; Oriental Golden Plover.

Tubay River, northern Mindanao. — April 22, 1904: "Golden Plovers" with black bellies" were noted; later noted "Golden Plovers with black breasts;" again: "in spring breeding plumage, with gold backs and black underparts [Apr. 22]."

Large flock noted at Dan Canon Farm, 15 miles northwest of Zamboanga, March 23, 1906.

Heard, at night, Zamboanga, April 5, 1906.

Six, in pairs, at Ayala, Mindanao, P. I., April 24, 1906. Breasts now half black in spots.

Abundant on three small coral islands off the south end of Vitankir Island, January 5, 1906.

One near Padsan, Ilocos Norte Province, Luzon, January [illegible]

Two flocks frequented high, dry fields and waste about the mouth of the Laoag River, January 20–22, 1906.

Bacara, riverbank, Ilocos Norte Province, Luzon, Feb. 15, 1906.

Naranganir Island, off southern Mindanao, Jan. 25, 1906.

6 miles west of Isabella, Basilan Island, January [illegible]

Calubia River, north Samar, October 1, 1906.

A flock furnished us with 3, shot by Major General Leonard Wood, U.S. Army, on Cajoagan Island, off the north coast of Samar Island, October 2, 1906. No. 14342, ♂.

Princess Island, off N. E. Mindanao, October [illegible]

Caleeland Tower Caleel River, east Mindanao, Oct. 5, 1906.

(Sheet III.)

Charadrius dominicus fulvus (Gmelin).

Abundant on Loran Island (off Ubian Island), October 12, 1906, when 7 were brought in by General Wood's party.

Common on Sumindao Island, off Sitankai Island, Oct. 13, 1906, when 8 were shot by General Wood's party. None showed any black feathers below.

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

Abundant, 2 shot, on Cuyo Island, Sulu Sea, September 10, 1906.

3 noted at Culion, Calamian Island, September 13, 1906.

73. Ægialitis dubia (Scopoli).
Little Ring Plover.

Several were seen on the broad sand beaches at Davao, on the Gulf of Davao, southern Mindanao, October 24, 1903. The only Plover shot (probably an Oethodromus) was eaten by crits. Oethodromus was in flocks, Ægialitis in pairs or single.

"Big" and "Little Ring Plovers" were noted as abundant on the sandy shore and muddy flats bordering Sarangani Bay at Makar and Bula, southern Mindanao, October 26, 1903, when "Pale Ring Plover without chest band" was also noted (only at Makar).

Little Ring Plovers were noted at Jolo, Sulu November 21–26, 1903.

Little Ring Plovers were noted on Sungdung Island, off Sulu, P. I., November 25, 1903.

"Median Ring Plovers" were noted on Pata Island, off Sulu, P. I., November 25, 1903.

Two were shot (Nos. 13333 and 13334) at the Quartermas=
=ters' corral at Iligan, northern Mindanao, February 15, 1904.
Flocks fed in the corral and roads.

(Sheet D.)

Ægialitis dubia (Scopoli).
Little Ringed Plover.

First observed at Malabang, Mindanao, September 29 and October 7 to 9, 1905.
Noted at Glan, southern Mindanao, October 26, 1903.
Two seen at Manila, October 2, 1905.
Several " " " 12–18, 1905.
" " " 30, 1905.
One seen at San Ramon Farm, 15 miles northwest of Zamboanga, Mindanao, P. I.
One seen at Zamboanga, Mindanao, P. I., April 5, 1906.
Noted as "rare" on the Tubay River, northern Mindanao, April 22–24, 1904; "very sharply black-ringed."
Baganga, eastern Mindanao, April 26, 1904.
Agusan River from Pilar to Jativa, Mindanao, May 6, 1904; Jativa, May 6 & 7, 1904.
Jativa to Salocino, Agusan River, Mindanao, May 7, 1904.
Varicella, on the Agusan River, Mindanao, May 7 and 8, 1904.
"One" noted, on the Agusan River near Lake Linao, Mindanao, May 9, 1904.
One at mouth of Libang River, Agusan Valley, Mindanao, May 10, 1904.
San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.
Camp Motsenburg, " " " 28, "
Dagupan, Pangasinan Province, Luzon, Nov. 30, 1905.

(Sheet III.)

Ægialitis dubia (Deopoli).

(Abundant on coral reefs surrounding three small wooded islets, off the south end of Ditanki Island, January [illegible]

Plovers of the same species as No. 14688 (identify later) were abundant in cultivated fields bordering the Laoag River, below the town of Laoag, January 16, 1907.

Laoag River from Laoag to Dingras, January 16, 1907.

" " " Dingras " Laoag " 18, "

(An Ægialitis (No. 14707) was abundant, in pairs from Laoag to the mouth of the Laoag River, and its ~~habits~~ actions reminded one of those of the Killdeer, January 19, 1907.

(An Ægialitis (No. 14707) was common on the Laoag River from Laoag to the river mouth, January 20-22, 1907.

An Ægialitis (No. 14707). — Laoag River at Laoag, January 27, 1907

" " " " . — Very abundant on the Laoag River and Paoay Lake, February 5, 1907.

(An Ægialitis (No. 14707) was seen near Davila, Ilocos Norte, Feb. 15, 1907

" " " " " on the rivers and sea beaches, from Bojeador to Laoag, March 9, 1907.

Aparri, northern Luzon, May 29, 1907.

Mouth of Baco River, Mindoro, Nov. [illegible]

6 Miles west of Isabella, Basilan Id., January 28, 190[illegible]

Lumang, east Samar, October 3, 1906.

Catell and lower Catell River, Oct. 5, 1906, when No. 14377, ♂ ad., was collected. "Black collar. Upper parts dark." "Abundant."

(Sheet IV.)

Ægialitis dubia (Scopoli).

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

Left in Bureau of Science: Nos. 14707, 14845, and 14688.

Mactan Island, off E. Cebu Island, September 3, 1906.

Abundant, 2 shot, on Cuyo Island, Sulu Sea, September 10, 1906.

74. Ægialitis peroni (Bonaparte).
White-shafted Ringed Plover.

I shot one of these small Plovers on Santa Cruz Island, off Zamboanga, Mindanao, P. I., 1904.

"Small whitish Ringed Plovers," probably this species, were observed at Malabang, S. Mindanao, October 7–9, 1903.

Two specimens, shot by Leonard Wood, Jr., on Dammi Island, Sulu Sea, January 4, 1905.

A few were shot on three small islets off the south end of ~~Atanta~~ Dibutu Island, January 5, 1906.

On Fuga Island, May 29 and 30, 1907, Mr. William Dorr Carpenter shot 3, which should be compared with Ægialitis alexandrina (see specimens collected). This, the only species of Ring Plover seen, was abundant on Fuga.

No. 14341, ♀ad., was collected on Cajoagan Island, off north Samar, October 2, 1906.

Two specimens of this species or of Ægialitis alexandrinus (probably) were left in the Bureau of Science temporarily. Nos. 14869 and 14039.

(Sheet I.)

Ægialitis alexandrina (Linnæus).

Mr. William Dorr Carpenter caught a down young on the beach at Camp Wallace, La Union Province, Luzon, May 22, 1907. On May 24, 1907, I shot both parents at one shot. This family was all that we saw. The parents ran with incredible speed, leaving tracks 8 inches apart in the sand. They would settle and ruffle their feathers, lying in the sand, and then flutter off like wounded birds when followed, just as other plovers do.

Two specimens of this species (but posibly Ægialitis peroni) were left in the Bureau of Science, Nos. 14869 and 14039.

Sheet I.

Ægialitis geoffroyi (Wagler).
Geoffroy's Sand-Plover.
and

Ægialitis mongolica (Pallas).
Lesser Sand-Plover.

About 100 of this genus seen at Malí, S. Mindanao, Oct. 23, 1903.

"A new Plover, small, without ring was shot at Davao, southern Mindanao, October 24, 1903; but it was destroyed by ants. May have been Ægialitis geoffroyi. Cethodromus was seen in flocks among other waders on the broad sand beaches at Davao, on the Gulf of Davao, southern Mindanao, October 24, 1903.

A species of Cethodromus, noted as "pale Ring Plover without chest band" was common on the sandy shore of Sarangani Bay at Malar, southern Mindanao, October 26, 1903, when "Big" and "Little Ring Plovers were also noted.

Major-General Leonard Wood, U. S. Army, shot "a large, pale Ring Plover, like No. 13 , at Ilan, southern Mindanao, October 26, 1903.

Very abundant on broad coral flats bordering Pata Island, off Sulu, P. I. November 25, 1903 (No. 1314-9).

Numerous, in flocks, at the salt works near Zamboanga, Mindanao, P. I., February 11, 1904.

Ochthodromus geoffroyi (Wagler).

Geoffroy's Band-Plover.

Seen at Malabang, Mindanao, October 7-9, 1903.

Three noted at Manila, P. I., September 2, 1905.

Some were shot at Glan, southern Mindanao, Oct. 26, 1903.

Noted at Surigao and Placer, in northeastern Mindanao, April 20, 1904.

Noted at Bacuag, " " " 21, "

Abundant singly and in flocks, on the Tubay River, northern Mindanao, April 22-24, 1904.

Baganga, eastern Mindanao, April 26, 1904.

An Ochthodromus (see skins for indentification) was seen in thousands on coral reefs surrounding three wooded islets off the south end of Bibutin Island, Jan. 5 [illegible]

An Ochthodromus was seen on the sand islands in the Laoag River at Laoag, January 27, 1907; very abundant there on February 3, 1907.

Afari, northern Luzon, May 29, 1907.

On sandbars and logs at Casiguran, east coast of Luzon were very large flocks of birds of this genus (see specimens 15257—8 for positive identification.) June 1, 1907.

Mouth of Baco River, Mindoro, Nov. 1, 1906.

Balut Island, Surangani group, October 8, 1906 (specimens No. 14399. Examine.)

Tanang, east Samar, October 3, 1906; 4 shot by Lieut. Wood.

(Sheet III.)

Ochthodromus geoffroyi (Wagler).

Abundant on Loran Island (off Ubian Island), October 12, 1906. (The small-billed species, same as No. 14399 from Balut Island, October 8, 1906).

Very abundant on Jumindao Island, off Sitankai Id., October 13, 1906, when 4 were brought on the ship, all like specimen No. 14419, ♀ad.

Leonard Wood, Jr. shot two on Dimalue Island, off Tawi Tawi Island, January 8, 1906.

Mactan Island, off east coast of Cebu Island, Sept. 3, 1906.

Abundant, 10 shot, on Cenjo Island, Sulu Sea, September 10, 1906.

(Sheet II.)

Othodromus

Noted at Iligan, northern Mindanao, Feb. 15, 1904.
Noted at Malabang, southern Mindanao, October 7–9, 1903.
Noted at Malabang, southern Mindanao, September 29, 1903.
Some were shot at Ilan, southern Mindanao, October 26, 1903.
Noted at Surigao and Placer, in northeastern Mindanao, April 20, 1904.
Noted " Bacuag, " " " 21, "
Abundant on the Butuay River, northern Mindanao, April 22–24, 1904.
At Baganga, eastern Mindanao, April 26, 1904.
The small-billed species was seen on the Bacara River, Ilocos Norte, Luzon, March 9, 1907.
6 Miles west of Isabella, Basilan Id., January 28, [illegible]
Danang, east Samar, October 3, 1906; 2 shot by [illegible]
Maeta Island, off E. Cebu Island, September 3, 1906.
Abundant, 4 shot, on Tawi-Tawi Island, Sulu Sea, September 10, 1906.

76. *Himantopus leucocephalus* Gould.
White-headed Stilt; Australian [illegible].

The Stilt is unknown to the Moros of Zamboanga, who could not name it.

An occasional pair of Stilts was seen during a day flight on Lake Lanao (among the numerous floating grassy islands), May 17, 1904; also May 18 and 19, 1904.

I shot 4 of them, in flooded rice lands at Dimaro, northern Mindanao, May 12, 1904; the first I had seen in the Philippines. They seemed larger than our American Stilt, the note about the same. I preserved 3 females and 1 female. They were often seen in pairs; but, several times, flocks of about 30 were seen; and one flock contained about 100. They were feeding in rice paddies, and were quite gentle, but tough to kill with No. 8 shot. Those shot had the bill black; iris red; legs and feet purplish red, with dusky claws

79. Numenius variegatus (Scopoli).
Variegated Curlew. Tah'-la Tah-la.
Tah-gnonk' (Moros of Zamboanga), who [illegible] it)
Pal-ahn-took' (Visayan Filipinos of Zamboanga).

Three (3) were noted at Mati, southeastern Mindanao, Oct. 25, 1903.
Numerous at Davao, southern Mindanao, October 24, 1903.
One was noted at Makar, on Sarangani Bay, southern Mindanao, October 26, 1903.

Major-General Leonard Wood, U. S. Army, shot one at Glan, southern Mindanao, October 26, 1903.

Three were seen on the beach between Taglibi and Jolo, November 21, 1903. Jolo, Sulu, November 21-26, 1903.

I shot one on Dungdung Island, off Sulu, P. I., November 24, 1903.

Common on broad coral flats bordering on Pata Island, off Sulu, P. I., November 25, 1903. General Wood shot enough for our table.

I shot one on Pangapuyan Island, off Mindanao, 12 miles east of Zamboanga, December 11, 1903.

Numerous on the Cabasaran River, southern Mindanao, P. I. January 30, 1904; also one near the residence of Datto Salis Hasin, 6 miles inland and 2 miles from the river.

Variegated Curlew. (Sheet II.)

79. Numenius variegatus (Scopoli).

Some were seen at the salt works, near Zamboanga, Mindanao, P. I., February 11, 1904.

Noted at Iligan, northern Mindanao, February 15, 1904.

Numerous, February 16, 1904, on two reefs entering Dindangan Bay, northern Mindanao, P. I.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Many were seen when ascending the Tubay River, northern Mindanao, April 22, 1904.

Common on the Tubay River, northern Mindanao, April 22-24, 1904.

Dagupan River, Pangasinan, Luzon, Nov. 30, 1905.

Exceedingly plentiful on the shores and coral reefs of three small islands off the southern extremity of Leyte Island, January 5, 1906.

Very abundant at Cosiguran, east coast of Luzon, June 1, 1907. Dr. Paul C. Freeze shot 3.

Mouth of Baco River, Mindoro, Nov. 1, 1906.

On Pilinas Island none were seen on my first visit; but three were seen on October 7, 1906.

Sarangani Island, off southern Mindanao, January 23 and October 8, 1906. One shot January 23, 1906.

Balut Island, Sarangani group, January 23, 1906

Balut Island, Sarangani group, Oct. 8, 1906; abun= =dant; one shot by Dr. Paul C. Freeze.

Numenius variegatus (Scopoli).

Isabella, Basilan Island January 26, 1906

~~General Wood~~ Dr. Mearns shot one, the only one seen, at Lanang, east Samar, Oct. 3, 1906. Specimen: No. 143533, ♂.

Bucas Island, off N. E. Mindanao, October 4, 1906.

October 5, 1906, many were seen during the day on the lower Cateel River, east Mindanao; and, at evening flocks were passing north along the coast.

Manay, east Mindanao, October 6, 1906.

Abundant, one shot, on Loran Island (off Ubian Island), October 12, 1906.

Abundant, 4 shot, on Sumindao Island, off Sitankai Island, October 13, 1906.

Maimbun and Diet Lake Beach, Sulu Island, March 1 and 2, 1906.

One near mouth of Rio Grande, southern Mindanao, March 15, 1906.

Mactan Island, off E. Cebu Island, September 3, 1906.

Abundant, 10 shot, on Cuyo Island, Sulu Sea, September 10, 1906.

Two on Talicud Island, in the Gulf of Davao, Mindanao, July 17, 1906.

Mesoscolopax minuta (Sheet I.)

~~Numenius~~

Pah-nook'-puk (Visayan of Romblon).

One was seen beside a marshy fresh-water pond, at Surigao, northeastern Min=
=danao, April 20, 1904. Probably the same bird (No. 13,351) was shot at the same place Sept. 21st.

Noted "in small numbers" on the Tubay River, northern Mindanao, April 22-24, 1904.

Tolanus totanus eurhinus Oberholser.

Oriental Redshank.

Abundant on Loran Island (off Nbian Island), October 12, 1906, when two were shot. Specimen: No. 144414, Fad.

Abundant on the Tubay River, northern Mindanao, April 22 and 23, 1904.

Noted at Zamboanga, Mindanao, P. I., [illegible]

Noted on the Rio Grande, Mindanao, October 19, 1903.

"A large, whitish, loud-voiced Wader" was noted at Makar, on Darangani Bay, southern Mindanao, October 26, 1903, and on the Matalung River at Mala=bang, southern Mindanao, 1903.

One noted six miles up the Cabasaran River, southern Mindanao, January 31, 1904.

Singly and in flocks up to twenty at the salt works near Zamboanga, Mindanao, P. I., February 11, 1904. This bird utters a loud call, both on the ground and in the air, which is very distinctive.

One seen at Manila, P. I., September 29, 1905.

Abundant on the Tubay River, northern Mindanao, April 22 and 23, 1904.

Noted at Santa Mesa, near Manila, Oct. 23, 1905.

Noted at Cabo Island, Igat Bay, off S. Mindanao, P. I., April 2, 1906.

totanus eurhynus Oberholser.

83. Totanus ~~pulidris [illegible]~~

Oriental Redshank.

[The following is probably Totanus [illegible]

The Greenshank: Seen on the Tubay River, April 22, 1904, [illegible] one was shot and plucked, before [illegible]

A small flock was seen on wide coral flat beside Pata Island, off Sulu, P. I., November 5, 1906.

Several were seen at the salt works, near Zamboanga, Mindanao, P. I., February 11, 1904. Its notes are similar to those of ~~our~~ the Greater Yellowlegs of the United States.]

A flock seen in the Matalinig River, at Malabang, S. Mindanao, October 7, 1903 "Very noisy waders!"

A great many Redshanks and Greenshanks were seen during the ascent of the Tubay River, April 22 and 23, 1904. (This was the day preceding the terrible hurricane of April 23, 1904, which swept the north coast of Mindanao.). One large Snipe shot by Lt. Quackenbush or Capt. McCoy, which was not seen by me until it had been plucked, had greenish-gray legs and feet. It was ~~doubtless~~ probably the same species as the Totanus specimen sent by McGregor to Richmond for identification (get Richmond's identification).

On three South Islands of Sibutu, January 5, [illegible]

Abundant on Tumindao Island, off Sitankai Id., Oct. 13, 1906, where 13 ~~[illegible]~~ were shot; some retained striped feathers below.

(Sheet I.)

Helodromus ochropus (Linnaeus).

At Trinidad Lake, in the Benguet Highlands at about 4500 feet altitude, on December 3, 1905, I saw about six, never more than two together. One was swimming in a buffalo wallow.

I collected a specimen at Nagpartian, beside the Nagpartian River, March 4, 1907: No. 15017, ♀ad. Upper and under tail-coverts all pure white. Tail-feathers all white except that there are one or two subterminal dark cross-bands. Iris dark brown. Bill olive-green. Legs and feet green; claws plumbeous.

I saw this species on the Island of Dulu, ~~near~~ beside a small pond near the then residence of Panglima Hassan, 190 .

A single one (female) was shot on the bank of a wooded stream at Nagpartian, Ilocos Norte, Luzon, March 6, 1907.

85. Heteractitis brevipes (Vieillot).
Asiatic Wandering Tattler.

One was shot for the collection by General Wood, at Pata Island, off Sulu, P.I. November 25, 1903. It was found among the mangroves on the edge of a beach.

We found it numerous in ~~the~~ a mangrove swamp bordering Pangapuyan Island, off Zamboanga, Mindanao, December 11, 1903, when Colonel Harbord, U.S. Army, shot enough for our table. One was preserved (No. 13162). It frequently alighted on exposed roots of the mangrove trees at low tide.

On the Cabasaran River, southern Mindanao, January 31, 1904, a flock of hundreds of these birds was seen flying in angular sweeps up and down this broad stream. At night they roosted on an enormous drifting tree, on which 6 were shot at once, at dusk; they returned to the same spot. Smaller flocks were noted here and there along the bank.

Mangrove swamp between the Zamboanga salt works and the Celebes Sea, February 11, 1904.

Many were seen when ascending the Tubay River, northern Mindanao, April 22, 1904. Flocks " " Ap. 23.

(Sheet II.)

Heteractitis brevipes (Vieillot).

In flocks at Baganga, eastern Mindanao, April 26, 1904.

In large flocks off the southern extremity of ~~Sibuti~~ Dibutu Island, frequenting the shores of three small wooded islands; January 5, [illegible]

Specimen: (No. 14572. ♀ ad. Mouth of Subasu River, eastern Mindoro, Dec. 6, [illegible]

Malamani Island, opposite Isabella, Basilan, Feb. 13, 1904.

Very abundant on Coron Island (off Ulian Island), Oct. 12, 1906, when 9 were shot by General Wood's party. Specimen collected, No. 14408, ♀ ad., shot by Capt. James K. Thompson. This species alights, at high tide, on tips of tall mangroves. Its note a sweet whistle.

Abundant on Tumindao Island, off Tetanki Island, October 13, 1906, when 18 were shot; some had cross-barred feathers remaining on breast.

Mactan Island, off the east coast of Cebu Island, September 3, 1906.

Cuyo Island, Sulu Sea, September 10, 1906; abundant, 14 shot.

One shot on an Islet in Malampaya Sound, ~~east~~ west Palawan, September 12, 1906.

Two on Taliend Island, Gulf of Davao, Mindanao, July 17, 1904.

Actitis

86. Tringoides hypoleucos (Linnaeus).
Common Sandpiper.

Too-lah-long (Moros of Lake Lanao). No. 1295.
Gou'-gou (Visayan Filipinos of Manay, southern Mindanao).

[illegible]

Noted at Zamboanga, Mindanao, P. I., October 10-11, 1903.
" " Manay, S. E. " " " 23, 1903.
Ten were noted at Mati, " " " " 22, 1903.
Abundant everywhere on the Rio Grande, Mindanao, the river mouth up to Lake Liguasan, October 19, 1903.

At Davao, southern Mindanao, October 24, 1903, a Tringoides was passing around a carabao wallow, and crossed it by walking from tip to tip of a carabao's huge horns. One sat on a carabao's head when the animal was luxuriating in the mud.

At the Moro village of Maliyam, southern Mindanao, a few of these common Sandpipers were seen on the rocky shore; October [illegible].

Seen on the mud flat bordering Darangani Bay, at Bula, southern Mindanao, October [illegible], 1903.

On the island of Sulu, P. I., it was noted as follows: On the trail from Upa's house to Crater Mountain, November 15, 1903; on the beach near Siet Lake, November 18, 1903.

Common Sandpiper. (Shaw.)

86. Tringoides hypoleucos (Linnaeus).

at springs and beach at Jagibi, November 20, 1903; common along ten miles of beach between Jagibi and Joio, November 21, 1903. Jolo, Sulu, November 2, [illegible]

Seen on Dumaiang Island, off Sulu, [illegible]

" " Tata " " " "

Zamboanga, Mindanao, P. I., December 2, 1903.

Shot on Pangapuyan Island, off Mindanao about 11 miles east of Zamboanga, December 11, 1903, and December 19, 1903; again noted February 2, 1904.

Zamboanga, Dec. 7, 1903. Wherever there is water, either salt or fresh, running or standing, one is quite sure of seeing this Sandpiper. Even a casabao wall is not scorned by it, and the wallowing buffalo, covered with mud, often serves it for a rostrum. At Davao (see above), its habits, and especially its bowing motion, are quite like those of our Spotted Sandpiper.

Seen, January 30, 1904, on the Cabasaran River, southern Mindanao, P. I.

Seen at Buluan, on the mainland of Mindanao, opposite Buluan Island, January 31, 1904.

Common along the Cabasaran River, and at the residence of Datto Salis Hasspin, southern Mindanao, January 31, 1904. Found at Tambigan, Tambigan Bay, southern Mindanao, February 1 & 2, 1904.

Ping-Ping (Ping-ping) (Moros of Cagayan Sulu) (Sheet III.)

86. Tringoides hypoleucus (Linnaeus).

The only bird seen on the beach at Dapitan, northern Mindanao, P. I., February 14, 1904, (Sandpiper) was one.

Abundant, as usual, at the Zamboanga salt works, February 11, 1904 (one shot).

Noted at Iligan, northern Mindanao, February 15, 1904.

Abundant at the mouths of two rivers that join Linidangan Bay at the Subano village of Mucas, in northern Mindanao, February 16, 1904.

One was shot at Bual (Datto Mipa's market) Sulu Island, P. I., February 21, 1904.

I found this Sandpiper abundant on the island of Cagayan Sulu, in the Sulu Sea, P. I., February 25 and 26, 1904. Two (Nos. 13373-4) were collected. Called Ping-ping by the Moro natives. On February 25, as I walked down the rocky shore many were seen. Not infrequently they ran into caves, in one of which I nearly caught one with my hands. In the afternoon I saw many of them on a stream in a mangrove swamp.

Noted at Cotabato, Rio Grande Valley, Mindanao, March 2-5, 1904.

" " Kudarangan, " " " 6, "

None were seen in Paraca Valley, April 3 to 9, 1904.

Noted in the road from Pantar to Marahui, Mindanao, September 27, 1903; many seen on shores of Lake Lanao the following day; some on rocks on shore, others crossing the lake.

(Sheet IV.)

Actitis hypoleucos (Linnaeus).
Common Sandpiper.

It was abundant on the lowest portion of the Mataling River, at Malabang, Mindanao, October 7-9, 1903.
Noted at Glan, southern Mindanao, October 26, 1903.
Descending the Rio Grande, from Lake Legueasan to the rivermouth, Mindanao, May 28 and 29, 1904, none were seen.
Noted at Bacuag, northeastern Mindanao, April 21, 1904.
Noted at Dinagat, Island of Dinagat, April 21, 1904.
Noted at Surigao, northeastern Mindanao, April 21, 1904.
" " Tubay, " " " 22 "
Many were seen during the ascent of the Tubay River, northern Mindanao, April 22, 1904.
Numerous at San Ramon Farm, 15 miles northwest of Zamboanga, Mindanao, P. I., March 23, 1906.
Seen at Margosatubig, S. Mindanao, April 2, 1906.
Seen on Malanipa Island, off S. Mindanao, P. I., April 1, 1906.
Seen on Cabo Island, Igot Bay, off S. Mindanao, P. I., April 2, 1906.
Zamboanga, April 11, 1906.
Ayala, Mindanao P. I., April 24, 1906.
Sept. 28, 1903. — A few were seen crossing the open waters of Lake Lanao, skimming close to the surface.

(Sheet V.)

Actitis hypoleucos (Linnaeus).

Noted on the Seramaya Marsh, near Datto Ali's Fort, March 7-11, 1904.

Rio Grande at mouth of estero which drains the Seramaya Marsh, March 7, 1904.

Noted on the Rio Grande, Mindanao, between Cotabato and the rivermouth, March 14, 1904.

Zamboanga, March 15, 1904.

Lake Mainit, northern Mindanao, April 24, 1904; also on the Tubay River from Jabanga to Santiago, the same day.

Numerous on the Tubay River, N. Mind., April 22-24, 1904.

Noted on streams, from Bagangan to Christian Ide's hemp plantation, eastern Mindanao, April 26, 1904.

Noted on the River, one days march west from Ide's hemp plantation, eastern Mindanao, April 27.

Noted on the Cateel River at the Mandayan village of Cateel, eastern Mindanao, May 2, 1904; also at Calatugan on the upper Cateel River, May 2, and in the Coast Range mountains and on the head of the Cateel River, May 3, 1904.

Noted on the Bucco River, a tributary of the Agusan, eastern Mindanao, May 4, 1904; also at Tingali, on the lower Bucco River, May 4, 1904; also on the upper Agusan River near Compostela, May 5, 1904.

Agusan River from Compostela to Pilar, Mind., May 5, 1904.
" " " Pilar to Sativa, Mindanao, May 6, 1904.

(Sheet VI.)

Actitis hypoleucos (Linnaeus).

Agusan River from Gaiwa to Patrocino, Mindanao, May 7, 1904.
" " " " " " " 7, "
"many floating down the river, on drift."
Lake Linao and thence to Talacogon, on the Agusan River, Mindanao, May 9, 1904; the only common sandpiper at this season."
Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11, 1904.
Agusan River below Butuan, Mindanao, May 11, 1904.
Several seen at Jimenez, northern Mindanao, May 12, 1904.
San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.
Camp Stotsenberg ? " " " 28, "
Dagupan River, Pangasinan Province, Luzon, Nov. 30, 1905.
Bued River, near Twin Peaks and at Colgans, " " 30 & Dec. 1, "
Trinidad Lake, at about 4500 feet altitude, in Benguet Province, Luzon, Dec. 3, 1905.

Noted on three small wooded islands off the south end of Dibutu Island, January [illegible]
Laoag River, below the town of Laoag, Ilocos Norte Province, Luzon, January 16, 1907.
Abundant from Dingras to Padian, Ilocos Norte Province, Luzon, January 17, 1907.
Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.
Abundant from Laoag to the mouth of the Laoag River " 19, "
Ditto, January 20–22, 1907.
Vintar Lake, Ilocos Norte Province, Luzon, January 24, 1907.

(Sheet VII.)

Actitis hypoleucos (Linnaeus)

Laoag River and Paoay Lake, Ilocos Norte, Luzon, January 27 and Feb. 5, 1907.

Laoag to Nagpartian, " " February 15, " "

Seen on the rivers and sea beaches from Bojeador to Laoag, Ilocos Norte, Luzon, March 9, 1907.

Lagayan River, west Luzon, [illegible] 23, 1906.

On the Bued River to above Teolgans, Benguet Road, Luzon, Dec. 24, 1906.

One seen at Lucena, southern Luzon, March 30, 1907.

Aparri, northern Luzon, May 29, 1907.

On the trail from Naujan to the Naujan River, Mindoro, March 25, 1907.

Calapan, Mindoro, October ~~29~~ 31, 1906.

Mouth of Baco River, Mindoro, Nov. [illegible]

Benibi River, Mindoro, Nov. 3 and 4, 1906.

A few pairs were seen on the Alag River, Mindoro, Nov. 5–8, 1906.

Sarangani Island, off southern Mindanao, October 8, 1906.

Balut Island, Sarangani group, October 8, 1906.

Isabella, Basilan Island, January 26 and 27, 1907.

Basilan Id., Camp No. 1 (Isabella) to Camp No. 2, January 28, 1907.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1907.

Malusa, west Basilan, February 19, 1906.

Camp No. 8 to Camp No. 9 (near Isabella), north Basilan, Feb. 21, 1906.

Musser's plantation, near Isabella, Basilan Id., Feb. 22, 1906.

(Sheet VIII)

Actitis hypoleucos (Linnaeus).

Lower Catubig River, north Samar, October 1, 1906.
Burengo, Catubig River, north Samar, October 1, 1906.
Borongan, east Samar, October 3, 1906.
Common at Lanang, east Samar, October 3, 1906, when General Wood shot No. 14351, ♀ ad.
Bucas Island, off northeast Mindanao, October 4, 1906.
Lower Cateel River, east Mindanao, October 5, 1906.
Caraga, east Mindanao, October 6, 1906.
Manay, east Mindanao, October 6, 1906.
Abundant on Tumindao Island, off Sitankai Island, October 13, 1906, when one was shot.
Cagayan Sulu Island, Sulu Sea, October 15, 1906.
Balabak and Melville, on Balabak Island, October 16, 1906.
Bona Bona, San Antonio Bay, east Palawan, Oct. 17, 1906.
Balambing, Tawi Tawi Island, January 6, 1906.
Manuk Manka Island, January 6, 1906.
Tatán, Tawi Tawi Island, January 8, 1906.
Siatu, Sissi Island, January 9, 1906.
East Bolod Island, Sulu Sea, January 10, 1906.
Baluk Baluk Island, January 10, 1906, when many large and small wading birds were seen by members of General Wood's party on the lagoon in the interior of the island, which I did not reach.

(Sec. I.)

Hypacrolius glareola (Pallas).
Wood-Sandpiper.

Noted on Lake Lanao, at Dawir, Mindanao, April 2, 192.
Noted along the Rio Grande, Mindanao, October 19, 1903.

One was seen beside a marshy pool in the edge of a swamp, near Panglima Hassan's residence on the island of Sulu, P. I., November 16, 1903.

Abundant in the ricefields at Zamboanga, Mindanao, P. I., December 2, 1903; 5 shot.

Zamboanga, Dec. 7, 1903. Legs greenish. Feeds in rice paddies, wading in shallow water and mud among the rice plants. It is rather shy, and, when startled flies up with notes like those of our Solitary Sandpiper, swiftly mounting in high curves, frequently alighting presently in the same spot.

Very numerous at the salt works, near Zam=
=boanga, Mindanao, P. I., February 11, 1904.

At a fresh-water lake near the south side of the island of Cagayan Sulu, in the Sulu Sea, Feb. 25, 1904, Captain Langhorne, U.S. Army, found some Waders, and brought me one of this species (No. 13368 Fad.).

(Sheet II.)

Rhyacophilus glareola (Linnæus).

Solitary Sandpiper. Wood-Sandpiper.

Noted on Lake Lanao, at Sourir, and at Rogayan, Taraca Valley, April 3, 1904.

All during the moonlight night of April 3-4, 1904, at Rogayan, Taraca Valley their voices were heard as they flew about and over camp.

Many were seen in ricefields around Rogayan, Taraca Valley, April 4, 1904.

On the Taraca River, At Ampuanatta's cota at Malungan, April 5, 1904 it was noted.

Flocks were seen between Galanan and Basayan, on the Taraca River, and great numbers at Basayan, near Lake Lanao, April 8, 1904.

Seen on the Matalung River, at Malabang, Mindanao, Oct. 7-9, 1903.

Many were seen, when ascending the Tubay River, northern Mindanao, April 22, 1904.

Seen at Manila, October 29, 1905.

Numerous at Ayala, Mindanao, April 24, 1906.

Seranaya Marsh, Rio Grande Valley, Mindanao, March 9, 1904.

One was noted on the lower Bacaca River at the Mandayan village of Singali, in the interior of Mindanao, May 4, 1904.

Two noted at Jimenez, northern Mindanao, May 12, 1904.

Near Pozorrubio, Pangasinan Province, Luzon, Nov. 30, 1905.

About 50 seen, and 3 shot, at Trinidad Lake, altitude about 4500 feet, Benguet Province, Luzon, Dec. 3, 1905.

(Sheet III.)

Rhyacophilus glareola (Pucl.).

Many were seen around pools of fresh water between Cumbinao and Laoag, Ilocos Norte Province, Luzon, Jan. 14, 1905.
Laoag to Dingras " " " " 16, "
Vintar Lake, Ilocos Norte Province, Luzon, January 24, 1905.
One pair, near Isabella, Basilan Island, January 26, 1906.
Nine were shot at Zamboanga, Mindanao, February 11, 1906.
Abundant near Isabella, Basilan Island, February 13, 1906.
Burengo, Calubig River, north Samar, October 1, 1906.
A few, about fresh-water pools at Lanang, east Samar, October 3, 1906.
Bucas Island, off northeast Mindanao, October 4, 1906.; several seen around fresh-water ponds.
Tagbanoa village, 5 miles inland from Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.
Fresh-water pools from Jolo to Maimbun, Crater Lake, and Diet Lake, Sulu Island, March 1 and 2, 1906.
, (Dorey's camp 4, Jan. 30, 31, 1906), west coast of Basilan Island, ~~of~~ March 3, 1906.
Common on inland pools of fresh water, on Cuyo Island, Sulu Sea, September 10, 1906.

Limosa

Mr. McGregor has the skin of a Limosa novaezelandiae from Cuyo Island, P. I.

A Godwit was noted at Davao, southern Mindanao, October 29, 1903.

A number of Godwits were noted during the ascent of the Dubay River, northern Mindanao, April 22, 1904, as follows: "large Snipe, white tail and rump," and "Godwits (?) abundant still," farther up the river.

This godwit (see specimen for identification) associated with other shore birds was abundant on the coral flats surrounding three small wooded islets off the southern extremity of Sibutu Island, January 5, 1906. (As the incoming tide submerged the extensive coral flats, the waders began to rise and fly around the islands, where they condensed as flock after flock settled upon the shores, which soon became crowded with them. Some of the circling flocks were enormous; and from one flock, General Wood brought down birds of the following genera: Limosa, Numenius, Totanus, Charadrius, Squatarola and Ortithodromus.

49 Limonites minutilla (Vieillot). (Short 2.)
[illegible] [illegible] (Baird). [illegible]
[illegible] damacensis (Horsfield). Horsfield's Little [illegible]

(No. 13170. Ad. Zamboanga, Dec. 17, 1903.)

About 20 "little Sandpipers" were noted at Mati, southern Mindanao, October 23, 1903.

An enormous number of Peeps were seen on the sandy shore and muddy flats bordering Sarangani Bay, at Makar and Bula, October 26, 1903, when specimens were collected at both places.

Major General Leonard Wood, U. S. Army, shot a Peep at Illan, southern Mindanao, October 26, 1905.

"Several kinds of Sandpiper", including many Peeps were seen along ten miles of beach between Taglibi and Golo, on the island of Leyte, November 21, 1903.

A flock of L. damacensis was seen at Manila, Sept. 26, 1905. Abundant at Manila, during October, 1905.

Limosa

Two, on Miamuk Manka Island, January 6, 1906; species the same as specimen No. from Three-Island of S. Sibutu Island.

(Sheet II.)

Limonites minuta (Leister).

My only record is the specimen recorded from Zamboanga.

(Sheet 1.)

50 [illegible] minuta [illegible]
[illegible] [illegible]
[illegible] damacensis (Horsfield) [illegible]
[illegible]

(nos. 13171, 13172, 13179. Zamboanga, Dec. 17, 1903.)

A flock of small Sandpipers was noted on the Rio Grande, Mindanao, October 19, 1903.

An abundance of Stints was noted at Davao, southern Mindanao, October 24, 1903.

Sandpipers "nearly as large as a Turnstone" noted at Davao, southern Mindanao, October 24, 1903. The same larger Sandpiper was afterwards seen at Makar and Buta, southern Mindanao, October 26, 1903.

A large flock of (mostly) L. ruficollis was seen at Manila, September 29, 1905. Abundant at Manila, during October, 1905.

(Sheet II.)

Limonites ruficollis (Pallas).

In prodigious flocks on the Tubay River, northern Mindanao, April 22 and 23, 1904.

In small flocks on the beaches around Ba=
=ganga, eastern Mindanao, April 26, 1904.

Dagupan, Pangasinan Province, Luzon, Nov. 30, 1905.

Thousands were seen on three small islands off the south end of Tibutic Island, January 5, 1906.

Aparri, northern Luzon, May 29, 1907.

Lower Calubig River, north Samar, October 1, 1906.

Abundant on Pumindao Island, off Sitanki Island, October 13, 1906, when 3 were shot. Bare tibia, and feet, black.

Flocks of hundreds seen on Mactan Island, off the east coast of Cebu Island, September 3, 1906.

Large flocks, 1 shot, on Cuyo Island, Sulu Sea, September 10, 1906.

Abundant on the Marigquina River, Rizal Province, Luzon Island, September 17, 1906.

51 [illegible]

(Nos. 13180 to 13183. Zamboanga, December 17, 1903.)

Many seen on the last six miles of the Cabasaran River, southern Mindanao, January 31, 1904.

Very abundant, in flocks up to 200 or more, at the salt works near Zamboanga, Mindanao, February 11, 1904.

Limonites rufiollis was abundant at Surigao, northeastern Mindanao, April 20, 1904. Others seen in ascending the Dubay River, northeastern Mindanao, April 22, 1904, were "turning red on head and breast."

51 fast color (Sheet II.)

Limonites damascensis (Horsfield)

Very abundant, sometimes in enormous flocks, on the Tubay River, northern Mindanao, April 22 and 23, 1904. Many were acquiring reddish-brown feathers of the nuptial plumage on their backs.

In small flocks on the sand beaches around Baganga, eastern Mindanao, April 26, 1904.

Lower Catubig River, north Samar, October 1, 1906.

Flock, at Lanang, east Samar, October 3, 1906.

Abundant on Mariquina River, Rizal Province, Luzon, September 17, 1906.

Gallinago megala [illegible].

Great Pin-tailed Snipe.

Ku-ra-ku-ra (Moros of Zamboanga).

Noted on the trail from Camp Vicars to Sonir, on Lake Lanao, April 2, 19[illegible]. Second sun at Vicars (3000 ft.), April 1, 1904; one shot (No. 13431), Bad., Tail 2 1/2 inches.

Noted at Zamboanga, Mindanao, P. I. [illegible]. Abundant on the Rio Grande, Mindanao, October 19, 1903. West side of Lake Lanao, [illegible], November 2, [illegible].

On the island of Sulu, P. I., this jacksnipe was noted as follows: On the trail from Upa's house to a camp on a stream at the foot of Crater Mountain, near Panglima Hassan's cotta, November 15, 1903. Near Mt. Sulieman and thence to the beach at Jablibi, November 20, 1903. It was noted from Jaglibi to Jolo, November 21, 1903.

Abundant in the rice fields of Zamboanga, Mindanao, P. I., December 2, 1903 (4 shot). A few were flushed from wet trails on the uplands.

Shot on Pangapuyan Island, off Mindanao about 12 miles east of Zamboanga, December 11, 1903.

Zamboanga, Dec. 7, 1903. Abundant. Mostly seen in rice paddies, but also in dry, bushy uplands and pastures. It is a difficult bird to shoot, although its flight is not quite so crooked as that of our own Jacksnipe.

(Continued—Sheet 4.)

(Sheet II.)

Great Pin-tailed Snipe.

Gallinago [illegible] [illegible].

Its note is softer, and it does not lie so closely. Some of those killed December 7 were noted as having greenish feet, and others more grayish. There were probably two species in band; but I do not now know whether there were two narrow-tailfeathered species (G. and G.) or a narrow-feathered and a broad-feathered species.

Cabasaran River, southern Mindanao, January 31, 1904.

At Zamboanga, Mindanao, February 11, 1904.

The "narrow tailfeathered" species was noted at Lubungan, northern Mindanao, P.I., February 14, 1904.

Captain S. L. Smith, 17th Infantry, U.S. Army, reported this bird from the island of Siassi, P.I., in 1903—'04.

Noted at Cottabato, southern Mindanao, March 3 to 5, 1904.

" at Kudarangan, " " " 6, "

These Snipe flew over our camp at Ragayan, Lake Lanao Basin during the moonlight night of April 3-4, 1904. Many were seen on the 4th, in rice-paddies.

On April 8, 1904, I noted this Snipe as "becoming scarce" in the Taraca Valley; but "a good many" were noted later in the same day, at Bacayan (near Ragayan and Lake Lanao); but none were seen in the Lake Basin thereafter (I left April 11).

Heard, flying over, at Manila, September 3, 1905.

Gallinago megala Swinhoe (Sheet III.)

Great Pin-tailed Snipe.

Turaca Valley, near Rogayan, Mindanao, April 3, 1904.
Noted at Lake Buliig, Mindanao, October 5 and 6, 1903.
Shot at Glan, southern Mindanao, October 26, 1903.
Large bags were made by the gunners, in the vicinity of Manila, during the last week of September, 1905. Bags of 50 to 100 were made near Manila, during the first week of October, 1905.
Abundant at Malabang, Mindanao, P. I. March 17, 1906.
Several were seen at Mercedes, 9 m. E. of Zamboanga, March 28, 1906. The slues were nearly dry, and they were mostly flushed from scattered clumps of bushes and trees.
One at Zamboanga, April 9, 1906.
Noted from the Seranaya Marsh to Labas, in the Libungan River Valley, southern Mindanao, March 12 and 13, 1904.
Noted at Baguio, Benguet, Dec. 1 and 2, 1905.
Seranaya Marsh, Rio Grande Valley, Mindanao, March 9 and 10, 1904.
San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.
Camp Stotsenberg ? " " " 28, "
Near Pozorrubio, Pangasinan Province, " " 30, "
Pacay Lake, Ilocos Norte Province, Luzon, Febr. 5, 1907. (one shot).
Mr. Haight finds a good many on the natural meadows on his place, called the Plaza, in northern Benguet, during the

Gallinago megala Swinhoe.

Some were shot at Trinidad Lake, Benguet Province, Luzon, between January 24, 1906 and January 4, 1907.

Batan Island, P. I. May 27, 1907.

One shot at Burengo, north Samar, October 1, 1906.

Bucas Island, off northwest Mindanao, October 4, 1906, when several were seen and No. 14 #366, ♀ ad., collected.

Malabang, southern Mindanao, March 15, 1906.

On September 16, 1906, General Wood and seven others made a bag of 560 snipe of this genus. Of these General Wood killed over 80 in one morning; none were Gallinago gallinago, as all had narrow outer tail-feathers; ~~at~~ and all that I critically examined were G. megala, though some of the others may have been G. stenura.

San Mateo, Rizal Province, Luzon, September 17, 1906.

Taytay, Rizal Province, Luzon, September 21, 1906.

Gallinago stenura (Kuhl). (Sheet I.)

I have registered No. 13773 ♀ ad., Trinidad Lake, Benguet Province, Luzon, Dec. 3, 1905 under Gallinago stenura.

Of 15 snipe shot at Trinidad Lake, altitude about 4500 feet, in the Benguet Highlands of Luzon, December 3, 1905, 3 were like the above-recorded specimen (No. 13773), the others being Gallinago gallinago.

Shot 1.

Gallinago gallinago (Linnaeus).
Common Snipe; Fan-tailed Snipe.

Noted on the Rio Grande, above Cottabato, Mindanao, October 19, 1903.

Noted at Cottabato, in the Rio Grande Valley, Mindanao, March 3-5, 1904.

" " Kudarangan, " " " 10, "

Of 15 snipe shot beside Trinidad Lake in the Benguet Highlands of Luzon, at the altitude of about 4500 feet, December 3, 1905, 12 were this species.

One shot beside the Sarag River, below Sarag, Jan. 20 to 22, 1907.

Vintar Lake, Ilocos Norte Province, Luzon, January 24, 1907.

~~One~~ Two shot at Zamboanga, Mindanao, February 11, 1906.

Near Isabella, Basilan Island, February 13, 1906.

100. Rostratula capensis (Linnaeus).
Painted Snipe.

I first met with this fine game bird at Mala=
=bang, southern Mindanao.

Several were seen and one shot in a rice field at Zamboanga, Mindanao, P. I., December 2, 1903.

From Seebohm's "Plovers", etc. 1888. — Rhynchaea capensis is called "Painted Snipe."

Several were seen in fields of the Moros at Mala=
=bang, bordering on the Malalung River, P. Mindanao, October 7 and 8, 1903.

Several were shot, in the vicinity of Fort William McKinley, Luzon, during the last week of September, 1905.

Ten shot at Ayala, Mindanao, P. I., April 24, 1906, by General Bliss and myself. Females larger, differently colored, and much handsomer than males. Breeds at Ayala according to the natives. Said to be most abundant there late in month of June.

Hydrophasis chirurgus (Scopoli).

Pheasant-tailed Jacana.

Ahm'-ok Lin-gee'-~~ste~~ pahn (Moros of Zamboanga).

"A grayish Wader with pure-white wings, the size of a Woodcock, was quite numerous, in pairs, on the lily-pads and water-cabbages patches bordering the grassy shores of Lake Lanao, at Sauir, April 9 and 10, 1904."

Lake Liguasan, Mindanao. — May 17, 1904. White-winged birds are seen across the open water, among the floating grassy islands of the Lake." "In the nearby grass of these floating islands are several of the slow-flying waders, having pure-white wings, that I first saw at Sauir, on Lake Lanao. Its flight is slow and heavy like that of the Herons. May 19: "Lake Liguasan contains many open stretches of water, a number of which I crossed. In some places water-cabbages float against the lotus flowers (pink water-lilies), which latter are stationary being deeply rooted in the lake-bottom, ~~Other~~ and form ~~large~~ extensive floating beds of vegetation which are the home of mysids of Rail and Waterhen, and of the two species of Jacana (Hydrophasis chirurgus and Hydralector gallinaceus). The present species ~~has the male much larger~~ exhibits a marked difference in the sizes of the sexes.

Hydrophasis chirurgus (Scopoli).

~~Comb-crested~~ Pheasant-tailed Jacana.

Very abundant on Lake Buluan, Mindanao, May 22, 1904. A specimen was shot for me by Bishop C. H. Brent. "They run swiftly on lily and lotus leaves."

At Camp Gregg, Pangasinan Province, Luzon, on Nov. 29, 1905, I was given a freshly-killed specimen, shot by Lieutenant Charles M. Mâigne, Seventh Cavalry, who saw a good many in Pangasinan Province.

Large flocks in the lotus on Paoay Lake, Ilocos Norte Province, Luzon, February 5, 1907.

On Lake Naujan, eastern Mindoro, March 25, 1907, flocks of these beautiful birds disported themselves on the beds of floating lotus leaves. They would fly about uttering cries resembling the mewing of a house-cat.

(Sheet I.)

Hydralector gallinaceus (Temminck).

Comb-crested Jacana.

Pah-pan-ook' (Moros of the Rio Grande Valley);
Bah-ku'-ku-low-e (Moros of Zamboanga).

Hundreds of these birds were seen upon floating beds of water-cabbages and other plants, bordering open stretches of water on Lake Liguasan, Mindanao, May 19, 1904.

Many were seen on Lake Buluan, Mindanao, May 22, 1904; but it was less numerous than the Hydrophasis chirurgus. In descending the Buluan River, from Buluan to Lake Liguasan, May 27, 1904, one was seen at Buluan, and a great many from that point to the lake. (One was shot, on the river, between Buluan and Pandog (No. 13487.) During flight it utters a low-whistled tremulo, and carries its spurs projecting vertically upward.

(Sheet I.)

65. Orthoramphus magnirostris (Vieillot).
Austro-Papuan Stone-Curlew or Stone-Plover;
Australian Stone-Plover.

4 Were shot on Loran Island, off Ubian Island, October 12, 1906. General Wood shot No. 14406, ♂ad. Iris yellow.

One of these remarkable birds was shot by Captain Frank R. McCoy, 3d Cavalry, A. D. C., U. S. Army, at Bula, on Sarangani Bay, southern Mindanao, October 26, 1903. It was shy, ran swiftly, and uttered a loud cry.

Several were seen on wide coral shoals on Pata Island, off Sulu, November 25, 1903. They were quite shy, and noisy. They appeared to be feeding on oysters and other mollusks.

Captain McCoy again found this bird between Davao and the headwaters of the Alip River, in southern Mindanao, P. I., in 1904.

General Wood and Captain Dorey killed several along tide creeks in mangrove swamps a few miles east of Zamboanga, Mindanao, March 1, 1904.

When ascending the Tubay River, northern Arizona, April 21, 1904, one seen.

One seen on Lammi Island, Sulu Sea, January 4, 1906.

~~Dozens~~ Scores of these birds frequented the coral reefs, at low tide, around three small islands of the south end of Siburtu Island, January 5, 1906.

(Sheet II.)

Orthoramphus magnirostris (Vieillot).
Tumindao Island, off Sitankai Id., Oct. 13, 1906.

Plegadis falcinellus (Linn.)
Glossy Ibis.

Large flocks at Busayan (near Rogayan and Lake Lanao), Mindanao, April 3, 1904.
Great flock on Lake Lanao, September 22, 1903.

The "Black Ibis," as this is called by the Americans on the Rio Grande, Mindanao, ~~October 19,~~ is present there in such numbers as to be a characteristic feature. On October 19, 1903, when I ascended the river to Lake Liguasan on a steam launch, flights of these birds were seen flying, in extended order, throughout the day. They had been shot for food until they had become rather shy. At a distance the flocks somewhat resembled flights of some species of Geese and Ducks. Towards evening the flocks increased in number.

Governor Bolton informed me, October 25, 1903, that he had not seen the "Black Ibis" outside of the Rio Grande Valley, Mindanao.

Seen at Cottabato, Rio Grande Valley, Mindanao, March 3-5, 1904.
Numerous at Kudarangan, " " " 6, "
In the morning of April 4, 1904, flocks flew about the rice fields surrounding Rogayan, in the Taraca Valley near Lake Lanao.
Flocks flew over our camp at Malungan, on Taraca River, April 5, 1904, at dawn. Large flocks were seen at Galapian, at the head of the Taraca River, April 6, 1904.

Plegadis falcinellus (Linnaeus).

Glossy Ibis.

Noted in flocks at Danir, on Lake Lanao, April 9 to 11, 1904.

I saw about a dozen large flocks of Glossy Ibises at daybreak on Lake Lanao, Mindanao, September 28, 1903.

Among the myriads of birds seen on Lake Liguasan, Mindanao, May 17 to 19, 1904, were countless flocks of the Glossy Ibis.

May 20 to 22, 1904, on the Buluan River, a swift, narow stream connecting Lake Liguasan with Lake Buluan, Mindanao, I saw many Glossy Ibises. Two of them sat on a dry tree above what resembled a nest, which circumstance led me to suspect that the Ibises were breeding, especially as many of them were seen in two, apparently paired. Some were also seen on Lake Buluan, May 22, 1904.

Seranaya Marsh, Rio Grande Valley, Mindanao, March 9-12, 1904. These Ibis soar high in air like Wood Ibises.

From on board the Ranger, flying in the Rio Grande at the mouth of the estero which drains the Seranaya Marsh, many flocks were seen flying over, on March 14, 1904.

Noted on the Rio Grande from the mouth of the Seranaya estero to the river mouth, March 14, 1904.

Gimanez, northern Mindanao, May 12, 1904.

Dissoura episcopus

116. ~~Melanopelargus episcopus~~ (Boddaert).

Dissoura episcopus (Boddaert).

White-necked Stork.

Mr. Robb told me March 7, 1904, that his specimen came from Zamboanga.

I forwarded a skin of this species to the U.S.N.M. from Mr. Marquis L. Robb, who obtained it at Zamboanga.

Captain F. R. McCoy, U. S. Army, noted two in the Alip River Valley, southern Mindanao, about the end of May, 1904 (2nd day out from Buluan).

Captain John R. White, Philippine Constabulary shot one near Zamboanga, Mindanao, P. I., ~~about~~ in February, 1906, and preserved the skin.

Governor Bolton found them on the Higo River, Mindanao, in August 1904 and September 1905.

This Stork was first seen by me on the Tubay River, northern Mindanao, April 23, 1904, when two were noted together at the mouths of two small rivers entering the Tubay River just below the native village of Daniiego. When descending the Tubay, two days later (April 24) two were seen separately, lower down the river. Both were shot at and one badly wounded, but no specimen taken. I noted: "Color glossy black, metallic shades, with white head and tail."

(Sheet 11.)

Dissoura episcopus (Boddaert).

White-necked Stork

One was noted, on the upper Bagauga River of eastern Mindanao, April 30, 1904.

On the Agusan River, a short distance below the mouth of the Libuton River, May 6, 1904, a flock of 5 flew from the river and alighted on a big tree. One noted on the Agusan River near Lake Linao, Mindanao, May 9, 1904.

Mr. Marquis L. Robb collected a specimen at Bambaanga, Mindanao.

Three were seen from a train on the Manila and Dagupan Railroad, between Manila and Tarlac, July 29, 1905.

Specimen: No. 14592. Sad., mouth of Baco River, near Calapan, eastern Mindoro, Dec. 9, 1906. Stomach filled with fish. Iris reddish brown. Bill brownish black, shading to dull red on terminal portion. Legs and feet reddish brown.

Major General Leonard Wood saw one near Calubig, on the Calubig River, north Samar, October 1, 1906.

Several were seen on Bucas Island, off northwest Mindanao, October 4, 1906, by Major General Leonard Wood, U.S. Army.

(Sheet I.)

Pyrrherodias manillensis (Gmelin).

~~102. Ardea cinerea Linnaeus.~~

Oriental Purple Heron.

Bar-augh'-ah (Moros of Lake Lanao). No. 12960 ♂ ad.

[illegible]

Noted at Dalir, on Lake Lanao, Mindanao, April 2, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Abundant on Rio Grande and Lake Liguasan, Mindanao, October 19, 1903. Very unsuspicious.

One was noted at Makar, on Davangani Bay, southern Mindanao, October 26 1903.

Numerous along the beach from Taglibi to Jolo, on the island of Sulu, November 21, 1903.

Several at Jolo, Sulu Island, November 21-26, 1903.

One shot on Pangapayan Island off Mindanao about 12 miles east of Zamboanga, February 2, 1904.

Noted on the Cabasaran River, southern Mindanao, Jan. 30, 1904.

Noted on the mainland of southern Mindanao, at Buluan, January 31, 1904.

One at Salis Hasin's residence six miles inland and two miles from the Cabasaran River, January 31, 1904.

Two were kept in confinement in the city park at Jolo, Sulu, where I saw them February 4, 1904. They were taken young on the island of Sulu, P. I.

Noted at Lubungan, northern Mindanao, February 14, 1904.

(Pyrrherodias manillensis (Meyen). Sheet II.)

Oriental Purple Heron.

102. Ardea ~~cinerea~~ sumatrana Raffles. Purple Heron.

Possibly occurs in the island of Bagayan Sulu, in the Sulu Sea, as I find the "Great Blue Heron" in a list of birds of the island given me by the Presidente and it is probable that Demigretta sacra was the bird meant. We saw none there.

General Leonard Wood and his staff visited East Bolod Island, in the Sulu Sea between Jolo and Zamboanga, ~~February 2~~ March 20, 1904, and ~~found~~ saw one of these Herons there.

Captain T. R. McCoy, in his march from Lake Buluan to Davao, Mindanao, in May and June, 1904, noted this Heron on the Davao side of the mountain divide at the head of the Alip River Valley.

Noted at Kindarangan, on the Rio Grande, Mindanao, March 6, 1904.

" between " and Barak, " " " 7, ".

Numbers were seen, April 4, 1904, at Rogayan — whence a young one was shot — to Malungan on the Taraca River. They were surprisingly tame. One shot at Rogayan was eaten by Ma-ha-tin-deg, a Moro servant.

Abundant, April 5, 1904, on the Taraca River from Malungan to the river mouth. It often allowed us to ride past within a few yards. On the upper Taraca River, around Galanan, these Herons were "too tame to even fly as the column of troops passed by," April 6, 1904.

(Shet III. 1

Pyrrherodias manillensis (Meyer).

Oriental Purple Heron.

Coming down the Taraca River, from Galauan to Basayan, April 8, 1904, many were seen; "mostly young; adults can be told by their black necks. Skulks in the grass with only head and neck in view, seldom taking flight." "At evening numbers of them flew over our camp at Basayan."

Myriads were seen to rise from the marshes spread around Dauir during the military movements of April 9 and 10, 1904.

Several were seen on Lake Lanao, Mindanao, September 28, 1903.

Malabang, Mindanao, October 7-9, 1903.

Noted at Lake Buliig, Mindanao, October 5 and 6, 1903.

Lake Liguasan, Mindanao. — May 17 to 19, 1904. "Very abundant." Later a "prodigious number" noted: May 18: Oriental Purple Herons were frequently seen flying with fish in brak. These birds are very gentle. Frequently one would simply flop from the water-edge over some tall grass and disappear only a yard or two away.

On the Buluan River, connecting lakes Buluan and Liguasan, Mindanao, on the night of May 19-20, 1904, these Herons made an awful row. This beautiful Heron was abundant, May 20 to 22, on the river. The Moros of the Moros of the Rio Grande Valley call it Bo-go'-Kah or Bo-gok'.

Pyrrherodias manillensis (Meyer).
Oriental Purple Heron.

It was also numerous on the Buluan River between the Moro village of Buluan and Lake Buluan, as well as around the lake itself, May 22, 1904. I saw a Heron and Brahminy Kite perched on the same tree.
In descending the Buluan River, from Buluan to Lake Liguasan, May 27, 1904, this species was again seen in great abundance, as well as along the Rio Grande from Lake Liguasan to the rivermouth, May 28 & 29, 1904.
Noted at Davao, southern Mindanao, July 15 to 20, 1904.
Noted at Labas, Libungan Valley, east of Cotabato, southern Mindanao, March 12, 1904; once to Seranaya, March 13, 1904.
Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904. Seranaya Port, March 11-13, 1904.
Abundant on the Rio Grande at the mouth of the estero which drains the Seranaya Marsh, and thence to the rivermouth, March 14, 1904.
These Herons now have their nuptial plumes.
On the Tubay River, where herons and shore birds were phenomenally abundant, April 22-24, 1904, at the time of the severe hurricane of April 23, 1904, I ~~was surprised by~~ noted with surprise the entire absence of this common heron.
In going down the Agusan River from Compostela, none were seen until Vaiecilla was reached. From that point down it was abundant, especially on Lake Linao, May 8 and 9, 1904.

Pyrrherodias manillensis (Meyer).

Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904; one adult shot and eaten.

Agusan River below Butuan, Mindanao, May 11, 1904.

Many were seen on the Manila and Dagupan Railroad, from Manila to Camp Gregg, Luzon, July 29 and 30, 1905.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Stotsenburg, ? " " " 28, "

Along the Manila and Dagupan Railroad, between Camp Stotsenburg and Camp Gregg, Luzon, November 29, 1905.

Pozorrubio and Bued River, Luzon, Nov. 30, 1905.

Several were noted at Trinidad Lake, at the altitude of about 4500 feet, in highlands of Benguet, Luzon, Dec. 3, 1905.

A few, flew, croaking loudly, from ponds and streams between Currimao and Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

Laoag River from Laoag to Dingras, January 16, 1907.

Noted as very tame from Dingras to Badsan, Ilocos Norte Province, Luzon, January 17, 1907.

Vintar Lake, Ilocos Norte Province, Luzon, January 24, 1907.

Laoag to Nagpartian, do February 15, "

Vicinity of Nagpartian, do Feb. 15—Mar. 9, 1907; 2 shot.

Several were seen, from our camp on the Nagilliian River to the coast at San Fernando, Luzon, ~~March~~ May 19 and 20, 1907.

Pyrrherodias manillensis (Meyer).

A large heron, probably this species, was seen May 26, 1907, off the mouth of the Cagayan River, near Aparri, northern Luzon.

Aparri, northern Luzon, May 29, 1907.

At Casiguran, east coast of Luzon, June 1, 1907. It was common. One was shot by Dr. Paul C. Freere and skinned by Mr. Willard Dorr Carpenter.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Stream at base of Mount Mayon (altitude of mountain 7943 feet), Tabaco Pueblo, Albay Province, Luzon, June 4 and 5, 1907.

One seen on the trail from Naujan to the Naujan River, eastern Mindoro, March 25, 1907.

Very abundant on Lake Naujan and the Naujan River the same day.

We found these birds breeding on the Bah-roar'-ring River at Todaya, altitude 4000 feet on Mount Apo slope, July 11 to 13, 1904. The young set up a tremendous crying every morning.

One seen on the Gulf of Davao, southern Mindanao, July 15, 1904.

Noted at Dulag, east coast of Leyte, July 25, 1906.

[illegible])

104. ~~Herodias~~ intermedia (Wagler).

[illegible]

[illegible] Mindanao, but no specimen taken.

"White herons", perhaps this species, had been seen by Major Gierson at Camp Wallace, La Union Province, Luzon, some weeks previous to our visit, which was May 20-25, 1907.

[The following records are partly Egretta garzetta (Linnaeus):—

One seen on the Rio Grande, Mindanao, October 19, 1903. It stood upon the riverbank and pecked rapidly into the muddy shore with its bill, which [illegible].

One noted at Malabang, Mindanao, P.I., November 1, 1903.

"Black-legged Heron" noted at Zamboanga, Mindanao, February 11, 1904.

"Black-legged Heron" noted at Iligan, N. Mindanao, Febr. 15, 1904.

A pair of White Herons, possibly of this species, was noted on the island of Cagayan Sulu, in the Sulu Sea, February 25, 1904. Captain Langhorne also saw a white Heron in twice crossing the island on February 25, 1904.]

Noted at Malabang, P. Mindanao, October 7 to 9, 1903.

Tubay River, Mindanao.—April 22, 1904: "Black-billed White Heron seen singly at several places." Later, noted Black-billed, yellow-footed Heron (white) common singly."

Lake Liniao to Talacogon, Agusan Valley, Mindanao, May 9, 1904.

Many were seen on three small, wooded islands off the south end of Siburan Island, Jan. 5, 1906.

Mesophoyx intermedia (Wagler).

Several small herons, probably this species, were seen off the mouth of the Cagayan River, northern Luzon, May 26, 1907.

Aparri, northern Luzon, May 29, 1907.

Several white herons seen on the rocks near Santo Domingo de Basco, Batan Island, P. I., May 27, 1907, were supposed to be this species.

On Fuga Island, May 30, 1907, one ran a mile in front of me along the beach when I had lent my gun. Others were seen.

This bird, which can be recognized in life by the coloring of the bill and feet from Egretta garzetta, was seen in small numbers on Naujan Lake, March 25, 1907. A few were noted on the lower Catubig River, Oct. 1, 1906.

Major General Leonard Wood, U.S. Army, secured a specimen (No. 14343, ♀ ad.) for the collection, on Cajoagan Island, off north Samar, October 2, 1906.

General Wood shot ~~specimen~~ one on Bucas Island, off northwest Mindanao, October 4, 1906.

I shot and wounded one on the lower Cateel River, east Mindanao, October 5, 1906. This species has greenish olive legs and feet, with underside of toes yellow. Bill green-brown above, yellowish on mandible and extreme tip of maxilla. extreme tip of maxilla.

(Sheet III.)

Mesophoyx intermedia (Wagler).

Quite common on Tumindao Island, off Sitanki Island, October 13, 1906, when Genl. Wood shot two

Many around fresh-water lakes, on Cagayan Sulu Island, Sulu Sea, October 15, 1906.

On Lumbucan Island, October 16, 1906, Mr. Horace Fletcher shot specimen No. 14447, ♀ ad.

Shore of San Antonio Bay, near Bona Bona, east Palawan, October 17, 1906.

Bongao Island to Tawi Tawi Island, January 6, 1906.

About 20 noted on Dimalu Island, off Tawi Tawi Island, January 8, 1906.

Herodias timoriensis (Cuvier).

Australian White Egret.

Be-gok' Meh'-he (Moros of Zamboanga).

Captain McCoy shot a large white heron, ♀ ad., which I skinned. Iris pale yellow, almost white. Bill yellow; legs and feet purplish black. The only one seen. Agusan River, just below Varicella, Mar. 8, 1907. More were seen as soon as Lake Linao, Agusan Valley, was reached, on May 8 and 9, 1907.

Four seen at the rivermouth at Lucina, southern Luzon, March 30, 1907.

General Wood saw two on the lower Cotcot River, east Mindanao, October 5, 1906, and brought in a superb specimen nicely wrapped in paper; but, owing to exhaustion of the ship's supply of ice, ants attacked this and many other valuable birds before I could manage to skin them.

Egretta

103. ~~Herodias~~ garzetta (Linnaeus).

Little Egret.

One noted, a short distance north of the Rio Grande, between Datto Piang's hacienda and the Seranaya Marsh, March 7, 1904.

In addition to the Cattle Egret, two small species of white herons were abundant on the Tubay River, northern Mindanao, April 22–24, 1904. One of them had a black bill and feet, but yellow toes; common all along the river, almost always singly, but three once seen together; one seen standing between two Cattle Egrets.

Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904.

A number seen at Casiguran, east coast of Luzon, June 1, 1907, when one was shot by Mr. William Dorr Carpenter. Some may have been Mesophoyx intermedia.

Bongao Island, January 6, 1906.

Balambing, Tawi Tawi Island, January 6, 1906.

(Sheet I.)

105? [illegible] egretta sacra (Gmelin).

Cattle Egret.

My first sight of this graceful bird was on July 25, 1903, when passing through San Bernardino Strait, on the southeastern projection of the island of Luzon, when one flew close to the ship (U.S.A.T. Sherman).

Sunday, August 9, 1903.—On board the U.S.A.T. "Borneo", one of these Herons flew past the ship, off the coast of northern Mindanao, a few miles west of Dapitan Bay, on the Sulu Sea.

One was seen at Marivelis, Luzon, P. I., August 2, 1903.

Dr. Hicks shot one for me with his pistol, on the beach near Siet Lake, Nov. 18, 1903.

Several were seen along ten miles of beach between Taglibi and Jolo, November 21, 1903. It is almost the same color as the bowlders along the shore. Jolo, Sulu, November 21–26, 1903.

Several were seen on the coral shores of Pata Island, off Sulu, P. I., November 25, 1903. One shot for the collection, by General Wood, was oviposeting.

(Sheet 11.)

Bog-ok' (Moros of Cagayan Sulu).

105. Demiegretta sacra (Gmelin). Hab. Eastern.

Small Blue Heron. — Several were seen and one collected, February 16, 1904, at the mouths of two rivers which enter Barangani Bay at the Subano village of Mucas, in northern Mindanao, P. I.

Several were seen, and one shot, at Santa Maria, northern Mindanao, P. I., February 17, 1904. Not, as a rule a shy bird.

I found this beautiful Heron common on the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904. Two were collected (Nos. 13372 and 13392). Sometimes they were surprisingly gentle, walking up to houses and people along the beach.

Several seen, and one shot, at Surigao, N. E. Mindanao, April 20, 1904.

This Egret is almost wholly confined in its range to the shores of the ocean, especially where rocks abound. I have never seen it in the fresh waters of the interior.

Ayala, Mindanao, P. I., April 24, 1906.

Scores of these beautiful birds were seen on three small islands off the south end of Sibutu Island, January 5, 1906.

Dagupan River, Western Luzon, December 23, 1906.

(Sheet III.)

Demiegretta sacra (Gmelin).

Major Grierson had seen a small gray Heron at Camp Wallace, La Union Province, Luzon, some weeks previous to our visit (May 20–25, 1907).

Calapan, Mindoro, October ~~30~~ 31, 1907

On Palmas Island it was not seen until my second visit, on October 7, 1906, when one was observed.

Sarangani Island, off southern Mindanao, January 23, 1906.

Cajoagan Island, off north Samar, October 2, 1906.

Surigao, northeast Mindanao, October 4, 1906.

A number of Reef Herons were seen on Bucas Island, off northwest Mindanao, October 4, 1906, when Captain Halstead Dorey and General Wood each shot one.

Manay, east Mindanao, October 6, 1906.

Abundant on Sumindao Island, off Sitanki Island, October 13, 1906, when two were shot which had no white on the throat.

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

Corregidor Island, Manila Bay, December 16, 1906.

Bongao Island to Tawi Tawi Island; also at Balam=
=bing on Tawi Tawi Island, January 6, 1906.

Demiegretta sacra (Gmelin).

Manuk Manka Island, off Tawi Tawi Island, January 6, 1906.

Sibutu town, on the west coast of Sibutu Island, Jan. 7, 1906.

Abundant on Simalue Island, off Tawi Tawi Island, January 8, 1906.

East Bolod Island, Sulu Sea, January 10, 1906.

Baluk Baluk Island, January 10, 1906.

Maimbun and Diet Lake Beach, Sulu Island, March 1 and 2, 1906.

Cuyo Island, Sulu Sea, September 10, 1906.

Dim, on an island in Malampaya Sound, ~~east~~ west Palawan, September 12, 1906.

114. Nycticorax manillensis Vigors.

Manila Night-Heron.

Mah-coak', Bagobos of the west shore of the Gulf of Davao, Mindanao. Senor had a captive young individual in his house at Tagulaya, on the shore of the Gulf of Davao, Mindanao, in July, 1904. Captain Langhorne and I discovered a large colony of them at Mercedes, about 9 miles east of Zamboanga, Mindanao, P. I.

Two that were shot at Mercedes, Mindanao, December 20, 1903, had eaten a quantity of fish and fiddler crabs.

Noted on the mainland of southern Mindanao, at Buhran, January 31, 1904. Found in a mangrove-bordered swamp.

Ten were seen on the Rio Grande, at Kudarangan, southern Mindanao, March 6, 1904.

Noted on Lake Lanao, Mindanao, in September, 1903.

A Heron, apparently this one, flew past the First Division Hospital, Manila, August 17 to 21, 1904.

One was kept in the Zoological Gardens, at Manila, August 1904 to August 15, 1905.

~~Several were seen on Lake Lanao, Mindanao, September 28, 1903.~~

Nycticorax manillensis Vigors.

Manila Night-Heron.

Two of these birds that were kept for a long time in the zoölogical gardens at Manila would quarrel and sometimes fight fiercely, when they would elongate their necks, spread their wings and go at each other like a couple of cocks, croaking loudly.

Four were seen on the Rio Grande, at the mouth of the estero which drains the Deranaya Marsh, March 14, 1904.

Many were seen on the Agusan River, near Lake Linao, Mindanao, May 8, 1904.

I found them roosting in numbers in the trees on three small islands off the south end of Dibutu Island, January [illegible], [illegible].

Flocks were flushed from the trees beside the Nauyan River, Mindoro, March 25, 1907.

Benibi River, Mindoro, Nov. 3 and 4, 1906.

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

Bimalue Island, off Tawi Tawi Island, January 8, 1906.

Pangpang, Dumanquilas Bay, southern Mindanao; August 17, 1906.

Gorsachius melanophus (Raffles).

Specimen from Mr. Marquis L. Robb. Bamboanga.
One was brought to me by a soldier, badly shot with rifle bullet, 1906. Not skinned.
Several were seen on the upper Bacoco River, a tributary of the Cagusan River, eastern Mindanao, May 4, 19
Lower Catubig River, north Samar, October 1, 1906.
One, at Lanang, east Samar, October 3, 1906.
Camp Connell, east coast of Samar Island, September 5, 1906.

(Sheet I.)

107. Butorides javanica (Horsfield).

~~Gou-gou~~ Jo-gach' (Little Green Heron.)

(Visayan Filipinos of Manay, S. Mindanao)

Doo'-oong (Moros of Zamboanga.)

Noted on Lake Lanao and the ~~Agusan~~ Agus River, during August and September, 1903.

Noted at Baganga, eastern Mindanao, October 22, 1903.

" " Manay, southern " , " 23,

On October 19, 1903, this Heron was seen in numbers all along the Rio Grande up to Lake Liguasan, Mindanao.

Abundant at Davao, southern Mindanao, Oct. 24, 1903.

Noted from Makar and Bula, on Sarangani Bay, southern Mindanao, October 26, 1903.

Captain Langhorne, U.S. Army, shot a specimen for me at Glan, southern Mindanao, October 26, 1903.

Noted on the mainland of southern Mindanao, January 31, 1904.

Noted at Zamboanga, Mindanao, February 13, 1904.

One ~~was~~ shot, February 16, 1904, by Captain Langhorne, U.S. Army, ~~at~~ on a river near Mueas, on Sarangani Bay, northern Mindanao, P.I., was ovipositing.

Two were seen on the shore of the island of Cagayan Sulu, in the Sulu Sea, February 25, 1904.

(Sheet II.)

107. Butorides javanica (Horsfield) Little Green Heron.

I saw one in the aviary of Commander Frederick W. Coffin, Commandant of the Pollok Naval Station, Mindanao, March 2, 1904.

One noted at Davao, on Lake Lanao, April 10, 1904.

Common at Malabang, Mindanao, October 7-9, 1903.

Several seen, one shot, at Glan, southern Min=
=danao, October 26, 1903.

Noted on Lake Liguasan, Mindanao, May 19, 1904, and on the Buluan River, connecting lakes Buluan and Liguasan, May 20 to 22, 1904. Its not closely resembles that of the American Butorides virescens.

This small Heron was quite numerous along the Rio Grande, from Lake Liguasan to the river mouth, May 28 and 29, 1904.

When ascending the Tubay River, northeastern Mindanao, April 22, 1904, many were seen.

Abundant at Davao, southern Mindanao, July 15 to 20, 1904.

Tubay River, Mindanao. — April 22, 1904: "extremely numerous." Later "very abundant. One nest contained half-grown young, which ran about in stranded driftage." "One nest, with large young, on snag in Tubay River."

Abundant on Lake Lanao and Agusan R. at Pantar, Aug. & Sept., 1903.

I saw one of these birds in the aviary of Commander Frederick W. Coffin, U.S. Navy, at Pollok Naval Station, southern Mindanao, March 2, 1904.

Seranaya Marsh, and Labas, in the Libungan Valley, east of Cotabato, Mindanao, March 12 and 13, 1904.

(Sheet III)

107 (Butorides javanica (Horsfield).

Seranaya Marsh, Rio Grande Valley, Mindanao, March 8-12, 1904.

Lybunigan Jail

Labas to Seranaya, Rio Grande Valley, Mindanao, March 12-13, 1904.

Very abundant on Lake Mainit and its outlet, the Tubay River, northern Mindanao, April 22-24, 1904.

On the Tubay River and Lake Mainit, northern Mindanao, April 22-24, 1904, these Herons were exceedingly plentiful; seen everywhere, all the time. Young, half-grown, skylarking about drifftage.

May 2 ~~to~~ and 3, 1904, this heron was observed to be rare from Cateel to near the mouth of the Cateel River in the East Coast Range of Mindanao.

May 4, 1904.- Noted on the Bacoco River, a tributary of the Agusan, in eastern Mindanao.

Very abundant on the Agusan River, from Pilar to Jativa, Mindanao, May 6, 1904, when I noted that its cry is almost exactly like that of Butoride virescens. A male was skinned.

Jativa to Patrocino, Agusan River, Mindanao, May 7, 1904; one.

Lake Linao, Agusan Valley, Mindanao, May 8 and 9, 1904.

Many on the Agusan River, from Lake Linao to Talacogon, Mindanao, May 9, 1904.

(Sheet IV.)

Tulorides javanica (Horsfield).

Agusan River below Butuan, Mindanao, May 11, 1904.

Jimanez, northern Mindanao, May 12, 1904.

Some were seen along the Manila and Dagupan Railroad, between Manila and Camp Gregg, Luzon, July 29 and 30, 1905.

Bued River below Twin Peaks, Luzon, November 30, and December 1, 1905.

Very numerous on three small wooded islets off the south end of Sibutu Island, Jan. 5, 1906.

Dingras to Padsan, Ilocos Norte, Luzon, January 17, 1907.

Flocks at Vintar, Ilocos Norte, Luzon, January 24, 1907.

One, only, at Nagpartian, do March 1, " .

One near Davila, do March 9, " .

Dagupan River, western Luzon, December 23, 1906.

Two on Bued River, near Colgans, Luzon, December 24, 1906.

Abundant at Casiguran, east coast of Luzon, June 1, 1907.

Abundant on Naujan Lake and the Naujan River, Mindoro, March 25, 1907.

La Mitan River (specimen 13943), Basilan Id., Feb. 4, 1906.

Malamani Island, off Basilan Island, February 13, 1906.

Lower Catubig River, north Samar, October 1, 1906.

Lower Catubig River, north Samar, October 1, 1906.

Flew, at Lanang, east Samar, October 3, 1906.

General Wood shot one on the lower Cateel River, east Mindanao, October 5, 1906.

(Sheet V.)

Butorides javanica (Horsfield).

Caraga, east Mindanao, October 6, 1906.

Manay, east Mindanao, October 6, 1906; one shot by Captain Halstead Dorey (No. 14383, ♀ juv.).

Abundant, two shot, on Loran Island (off Ubian Island), October 12, 1906.

Tumindao Island, off Sitankai Island, October 13, 1906.

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

About 10 seen in little tufts of mangrove on coral reef off Dimalue Island, January 8, 1906.

Maimbun, Crater Lake, Siet Lake, and Siet Lake Beach, on Sulu Island, March 1 and 2, 1906.

[Dorey's Camp 4, of Jan. 30, 31, 1906] west coast of Basilan Island, March 3, 1906.

Pangpang, Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Igat Bay, off S. Mindanao, April 2, 1906.

Hatima Island, Dumanquilas Bay, off S. Mindanao, April 2, 1906.

Ayala, western Mindanao, August 27, 1906.

About 10 noted on Mactan Island, off the east coast of Cebu Island, September 3, 1906.

Common, 3 shot, on Cuyo Island, Sulu Sea, September 10, 1906.

Mariquina River, near Manila, Luzon, September 17, 1906.

Taytay, Rizal Province, Luzon, September 21, 1906.

106. Bubulcus coromandus (Boddaert). Cattle Egret; Carabao-Bird. Garza Blanca (Spanish). Filipino. Tah'-boon (Visayan Filipinos of Manay, southeastern Mindanao and the Agusan River Valley). Ta-tah'-boong (Moros of Bagangan). In great flocks on Cattle Island.

A pair of White Herons seen on the island of Cagayan Sulu, Feb. 25, 1904, may have been this species.

Noted at Baganga, eastern Mindanao, October 2, 1903.
" " Manay, southeastern " " 23, "
2 " " Mati, southern " " 23, "
" " Parang, " " " 18, "

Abundant on the Rio Grande, Mindanao, October 19, 1903. Very tame everywhere. One was seen perched on the back of a carabao.

Noted at Davao, southern Mindanao, October 24, 1903.
" " Malabang, " " November 1, "
" on the west shore of Lake Lanao, " " 2, "
" " " north " " " " " " 3, "

On the island of Sulu, P.I., November 12-26, 1903, "Carabao Birds" were noted as follows: From Hassan's to Upa's [illegible], November 14; on the trail from Upa's house to Crater Mountain, November 15, 1903; at Mt. Sulieman and thence to the beach at Taglibi, Nov. 20; Taglibi to Jolo, November 21, 1903. Jolo, Sulu, November 21-26, 1903. Pata Island, off Sulu P.I., November 25, 1903.

Carabao-Bird; Cattle Egret. (Sheet II.)

106. Bubulcus coromandus (Boddaert).

Abundant at Zamboanga, Mindanao, P.I., Dec. 2, 1903.

General Wood shot two, near Zamboanga, at a mudhole in which a herd of carabao or water buffalo was wallowing. These animals rushed out, shook their heads threateningly, and eyed the two ~~ded~~ dead birds with as much resentment as if ~~two~~ some of their own number had been killed. The Carabao-Birds follow the range cattle, introduced from India and Australia, as well as the carabao, frequently alighting on their heads and backs. The flocks average about 25 birds. They are surprisingly tame, though both Moros and Filipinos consider them good food.

Seen in large flocks on the Cabasaran River, southern Mindanao, January 30, 1904.

Large flocks of Carabao-Birds were noted along the Cabasaran River of southern Mindanao, January 31, 1904. At nights their roosts were found in trees standing off shore, where they probably found greater safety.

Flocks were seen at Dipulog, northern Mindanao, P.I., February 14, 1904.

Flocks were noted at Lubungan, northern Mindanao, Feb. 14, 1904.

Noted at Iligan, northern Mindanao, February ~~14~~ 15, 1904.

Carabao-Birds with saffron plumes were seen at Malabang and Camp Vicars, March 31, 1904.

Carabao-Bird; Cattle Egret. (Sheet III.)

106. Bubulcus coromandus (Boddaert).

Noted at the Subano village of Mucas on Sin=
=dangan Bay, northern Mindanao, P.I., February 16, 1904.

Noted near Nipa's marketplace at Bual, on the island of Sulu, P.I., February 20, 1904.

I saw white Herons of some kind on the north side of the island of Cogayan Sulu, in the Sulu Sea; ~~Hdr~~ and Captain Langhorne, U.S. Army, saw them near the south side, February 25 and 26, 1904.

Captain T. L. Smith, 17th Infantry, U.S. Army, found a "large white Heron" on the island of Sicassi, P.I., in ~~1904~~ 1903-4, which may have been this ~~species~~ or a species of Herodias.

Those seen at the Pollok Naval Station and on the lowest part of the Rio Grande, Mindanao, March 2, 1904, had acquired the saffron-colored plumes.

March 3, 1904. Cottabato, southern Mindanao; many seen at daybreak flocking by. At evening they began to assemble at a roost on ~~the~~ a little island in the Rio Grande opposite Cottabato at 5:30 P.M. After hundreds had assembled in a little grove of nipa palm, on the river's edge, hardly large enough — one might suppose — for 100 birds, I began to count the incoming flocks, which

(Sheet IV.)

106. Bubulcus coromandus (Boddaert). Cattle Egret.
varied in numbers from two to 30 birds each, until 443 had arrived before it became too dark to count them. I estimated that almost 1000 birds were roosting in that small tuft of nipa, which is their regular, nightly roosting-place. Nearly all have aigrettes and saffron-colored heads and backs.

Noted at Kudarangan, on the Rio Grande, Mindanao, March 6, 1904.

Many flocks seen between Kudarangan and Barak, in the Rio Grande Valley, Mindanao, P. I., March 7, 1904.

Noted from Camp Vicars to Sauir, on Lake Lanao, Mindanao, April 2, 1904.

Noted at Rogayan, Taraca Valley, April 4, 1904. Great flocks were seen about the mouth of the Taraca River, on Lake Lanao, April 5, 1904. On the upper Taraca River, April 6 to 8, 1904, "enormous flocks" were noted, April 6, 1904.

We found large flocks of Carabao-Birds at Basayan, near Lake Lanao, April 8, 1904. I shot one (No. 13434), which was a male with testes enormous, and with saffron-colored nuptial plumes. It was cooked by a Hospital Corps soldier of the, who ate it and said that it was extremely good.

Many flocks on Lake Lanao, about Sauir, April 9 and 10, 1904.

Dr. H. F. Strine, U. S. Navy and I saw many of them near ~~Basal~~ Isabella, Basilan, January 19, 1904.

Several immense flocks of Cattle Egrets were seen at daybreak, on Lake Lama, Mindanao, Sept. 28, 1903.

Noted at Malabang, Mindanao, October 7-9, 1903.

106. Bubulcus coromandus (Boddaert).

Cattle Egret.

Noted at Buldung, Mindanao, October 1 and 2, 1903.
Flock of 40 " Lake Buhig, " , October 5, 1903.

On the Buluan River, connecting lake Buluan and Liguasan, Mindanao, May 21, 1904, I identified one individual of this species, and saw four other white Herons which may have been it. On May 22, I noted a flock of them between the Moro village of Buluan and Lake Buluan, and others were seen on the lake. When descending the Buluan River, from Buluan to Lake Liguasan, May 27, 1904, this species was again noted, but only in small numbers.

These Egrets were common along the Rio Grande from Lake Liguasan to the rivermouth, May 28 and 29, 1904.

In the town of Dinagat, Dinagat Island, April 21, 1904, I saw one white Egret perched on the roof of a native house. It had no saffron plumes, but was supposed to be this species.

When ascending the Tubay River, northeastern Mindanao, April 22, 1904, "many" were noted.

Abundant at San Ramon Farm, 15 miles N.W. of Zamboanga, Mindanao, P. I., March 23, 1906.
Seen at Margosatubig, S. Mindanao, April 2, 1906.

106. Bubulcus coromandus (Boddaert).

Jah'-bon (Visayans of the Agusan Valley).

The aviary of Commander Frederick W. Coffin, U.S. Navy, at Pollok Naval Station, southern Mindanao, contained one of these egrets which, on March 2, 1904, had acquired its saffron-colored nuptial plumes.

Piangs to Barak, Rio Grande Valley, Mindanao; March 7-11, 1904. Deranaya Fort, March 11-13, 1904.

Libungan Valley, east of Cotabato to Deranaya, Mind.; March 12-13, 1904.

Noted on the Rio Grande, at the mouth of the estero which drains the Deranaya Marsh, March 14, 1904.

Abundant from the mouth of the Deranaya estero to the mouth of the Rio Grande, March 14, 1904. About half of those seen had acquired the saffron-colored nuptial plumes, the remainder being white.

Abundant on the Dubay River and Lake Mainit, northern Mindanao, April 22-24, 1904.

Carabao-birds were abundant at Varicella, on the Agusan River, where are carabao and Indian humped cattle. At Nativa were only Indian cattle; but with them we saw a flock of Carabao-birds. These two flocks are all seen since leaving Baganga.

Lake Linao, Agusan Valley, Mindanao, May 6 and 7, 1904.

Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904.

Jah'-bon is the name used by Visayans of the Agusan Valley, Mindanao; but this name is usually applied to the Megapode.

(Sheet VII.)

Bubulcus coromandus (Boddaert).

Butuan to the mouth of the Agusan River, Mindanao, May [illegible], 1904.

Abundant at Jimenez, northern Mindanao, May 12, 1904.

Noted at several points on the Manila and Dagupan Railroad, from near Manila to Camp Gregg, Luzon, July 29 and 30, 1905.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Pozorrubio, Pangasinan Province, Luzon, Nov. 30, 1905.

Five were seen at Trinidad, at the elevation of about 4500 feet, in the highlands of Benguet, Luzon, Dec. 3, 1905.

Flocks were seen wherever there were carabao from Bued River Canyon to Dagupan, Luzon, Dec. [illegible]

Many good-sized flocks were noted between Currimao and Laoag, Ilocos Norte, Luzon, January 14, 1907.

Laoag to Dingras, do " 16, "

Dingras to Padsan, Ilocos Norte, Luzon, January 17, 1907.

Flocks about the carabaos near Pasuquin, Ilocos Norte, March 9, 1907.

Dagupan, Pangasinan Province, Luzon, Dec. 23, 1906.

In large flocks from Bued River Canyon to Dagupan, Pangasinan Province, Luzon, January 4, 1907.

At base of Mount Mayon, near Legaspi, Albay Province, Luzon, March 28, 1907.

Aparri, northern Luzon, May 29, 1907.

Abundant at Casiguran, east coast of Luzon, June 1, 1907.

(Sheet VIII.)

Bubulcus coromandus (Boddaert).

Pili Hot Springs, near Sibi, southeastern Luzon, June 3, 1907.

Near Tabaco, on base of Mount Mayon, Albay Province, Luzon, June 4 and 5, 1907.

A large flock was seen on Huga Island, P. I., May 29 and 30, 1907.

Noted on the trail from Naujan to the Naujan River, Mindoro, March 25, 1907.

The cattle egret was not seen when I first visited Palmas Island, January 21, 1906; but I saw a flock of about twelve there, on October 7, 1906.

Flock Isabella, Basilan Island, January 26, 1906.

Between Camp No. 1 (Isabella) and Camp No. 2, Basilan Id., Jan. 28, 1906.

Between Camp No. 3 and Camp No. 4, northwestern Basilan Island, January 30, 1906.

Flocks in south Basilan, between Camp No. 3 and Camp No. 4, Feb. 16, 1906.

Lower Catubig River, north Samar, October 1, 1906.

Common on the lower Catubig River; two shot at Catubig, north Samar, October 1, 1906.

Flocks of carabao birds were seen on the lower Cotcel River, east Mindanao, October 5, 1906, when Genl. Wood shot 1.

Noted with the carabao on Sulu Island, between Jolo and Bud Dajo Peak, October 11, 1906.

Flock at Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.

(Sheet IX.)

Bubulcus coromandus (Boddert).

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Dict Lake ~~Bud~~, March 1 and 2, 1906.

, [Dorey's Camp 4 of Jan. 30, 31, 1906] west coast of Basilan Island, March 3, 1906.

Abundant at Parang Parang, southern Mindanao, March 14, 1906. The lame one was still running at large about the fort.

Cotabato, southern Mindanao, March 15, 1906.

Malabang, southern Mindanao, March 15, 1906.

Ardeiobrychus

111. ~~Ardetta~~ sinensis (Gmelin).

Little Yellow Bittern.

Lake Liguasan, Mindanao.—May 17 to 19, 1904, very abundant. In flight it exhibits dark blue wing-quills, with buff coverts, the greater coverts appearing almost white. Although no specimens were taken, this Heron is found in all of the big grassy marshes of Mindanao.

Seen on Lake Lanao, Mindanao, in September, 1903.

Abundant on Lake Liguasan, Mindanao, October 19, 1903.

One seen at Zamboanga, Mindanao.

In pools and marshy places in the vicinity of Panglima Hassan's residence and of his cotta in a swamp at the foot of Crater Mountain a "little dark Bittern" and a "large Bittern" were noted, November 15–18, 1903. The small Bitterns were not Ardetta cinnamomea. One evening, I rode within ten feet of two of them that stood motionless beside a pool with their bills pointed straight up in the air, in a place devoid of cover. They did not fly or even move.

A "small brown Heron" was reported from the island of Biassi by Captain T. L. Smith, 17th Infantry, U.S. Army, which may have been this species of A. cinnamomea.

Numerous on the Bulwan River, connecting lakes Bulwan and Liguasan, Mindanao, May 20 to 22, 1904. Some were seen at Lake Bulwan, May 22, 1904.

(Sheet II.)

Ixobrychus sinensis (Gmelin).

Little Yellow Bittern.

When descending the Buluan River, from Buluan to Lake Liguasan, May 27, 1904, this pretty Bittern was again seen in abundance.

Seranaya Marsh, Rio Grande Valley, Mindanao, March 8–12, 1904.

One was seen at Trinidad Lake, in the highlands of Benguet, Luzon, at the altitude of about 4500 feet, Dec. 3, 1905.

Abundant on Paoay Lake, Ilocos Norte Province, Luzon, February 5, 1907; many lived in sugar cane grown beside the lake.

Abundant on Naujan Lake, Mindoro, March 25, 1907.

Cuyo Island, Sulu Sea, September 10, 1906.

(Sheet I.)

[illegible] (N[illegible])

110. Ardetta cinnamomea (Gmelin).
Little Chestnut Bittern.
Nah'-nas (Moro of Zamboanga).

Noted at Lake Lanao, during September, 1903.

Noted at Zamboanga, Mindanao, P. I., [illegible]

Very abundant along the banks of the Rio Grande, and on Lake Liguasan, Mindanao, October 19, 1903.

Abundant in the marshes and rice paddies of Zamboanga, Mindanao, P. I., December 2, 1903 (2 shot).

Zamboanga, Dec. 7, 1903. This species lives in shallow water among the tall grasses and water plants, where its peculiar note is frequently heard. Its meat is very good food.

Noted at Lubungan, northern Mindanao, February 14, 1904.

Abundant on the lower course of Taraca River, ~~from the~~ up to Malungan, Lake Lanao Basin, April 5, 1904. Sometimes hard to flush. One that had hid in the grass beside a little pool ~~and~~ could not be flushed.

Common at Buayan, ~~April~~ near Lake Lanao, April 8, 1904

Noted at Sauir, on Lake Lanao, April 9 and 10, 1904.

Observed and Lake Butig, south of Lake Lanao, and at Datto Grande's place, between Lake Butig and Matalung Falls, October 5 and 6, 1903.

Lake Liguasan, Mindanao. — May 17 to 19, 1904, abundant.

(Sheet II.)

Ixobrychus (Nannocnus) cinnamomea (Gmelin).
Little Chestnut Bittern.

Noted on the Bulwan River, which connects Lake Bulwan with Lake Liguasan, Mindanao, May 20, 22, 1904; descending this stream, from Bulwan to Lake Liguasan, May 27th, it was again seen in abundance.

Piungo to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904. Seranaya Fort, March 11–12, 1904.

Noted on the Rio Grande, at the mouth of the estero which drains the Seranaya Marsh, March 14, 1904.

Numerous at Pinanez, northern Mindanao, May 12, 1904.

Numerous along the Manila and Dagupan Railroad, from Manila to Camp Gregg, Luzon, July 29 and 30, 1905.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Very numerous around the shores of Paoay Lake, Ilocos Norte Province, Luzon, February 5, 1907.

Nagpartian, do " 15 to March 9, 1907.

At base of Mount Mayon, near Legaspi, Albay Province, Luzon, March 28, 1907.

Base of Mount Mayon, near Sobaco, June 4 and 5, 1907.

A few were on the shores of Naujan Lake and River, Mindoro, March 25, 1907.

San Mateo, Rizal Province, Luzon, September 17, 1906.

73 (Sheet III.)

Ixobrychus (Nannocnus) cinnamomea (Gmelin).
Pasig and Tanglay, Rizal Province, Luzon, Sept. 21, 1906.
One, seen at Dulag, on the east shore of Leyte, July 25, 1906, uttered a croaking note during flight.

(Sheet 1)

(Ardetta)

109. Ardetta flavicollis (Latham).

Chinese Bittern.

Noted on the Lower Rio Grande in Sept. & Oct., 1903

Noted at Zamboanga, Mindanao, P. I., October 5–16, 1903.

Seen frequently along the Rio Grande and on Lake Lignasan, Mindanao, October 19, 1903.

A "large Bittern" was noted near Panglima Hassan's place, on the island of Jolo, P. I., November 15–18, 1903.

Noted at Cottabato, southern Mindanao, March 3 to 5, 1904.

Noted on Lake Lanao.

A Bittern was noted at Basayan (near Ragayan), Lake Lanao Basin, April 8, 1904; and "at evening Bitterns were booming," but I am not sure that this was the species heard.

Noted at Sauir, on Lake Lanao, April 9 and 10, 1904.

Lake Lignasan, Mindanao. — May 17 to 19, 1904, abundant; also noted as numerous on the Buluan River, connecting lakes Buluan and Lignasan, May 20 to 22, 1904. In descending the Buluan River, from Buluan to Lake Lignasan, May 27, 1904, it was again seen at many places.

Some were noted when descending the Rio Grande from Lake Lignasan to the rivermouth, May 28 and 29, 1904.

(Sheet II.)

109 Dupetor flavicollis (Latham).

Noted near Barak, Rio Grande Valley, March 7, 1904.

Deranaya Marsh, do, March 8-12, 1904.

Noted on the Rio Grande, at the mouth of the estero which drains the Deranaya Marsh, March 14, 1904.

A pair and several single birds were noted on the Tubay River, northern Mindanao, April 22 and 23, 1904.

Varietta to Lake Linao, very abundant, in the Agusan Valley, Mindanao, May [illegible]; especially abundant on the [illegible] of the middle [illegible] Lake Linao to Tulacogon, Agusan Valley, Mindanao, May 9, 1904.

On the Island of Bataan, P. I., May 27, 1907, Mr. William Dorr Carpenter shot the only specimen seen, near the town of Santo Domingo de Bayac.

[Dendrocygna vagans was taken at Zamboanga, by Mr. A. H. Everett.] (Sheet I.)

119. Dendrocygna arcuata (~~Cuvier~~ Horsfield). [Not in Tree-Ducks]

Tree Ducks (all species of Dendrocygna seen are included under this at present.)

Kah-ging'—Knig (Moros of Lake Lanao).

Pato-del-monte (Viscayan Filipinos of Zamboanga).

The Tree Ducks of Lake Lanao appeared larger than those of Zamboanga. There are specimens of both.

Small Tree Ducks were noted at Zamboanga, Mindanao, P. I., October 10–16, 1903.

Abundant on the Rio Grande and Lake Liguasan, Mindanao, October 19, 1903, at which time no other Duck was identified.

Common (1 small species of Dendrocygna shot) in the marshes and ricefields of Zamboanga, Mindanao, P.I., Dec. 2, 1903. Zamboanga, Dec. 7, 1903. Not fat, but, feeding on rice, it has an excellent flavor. No other Ducks seen here.

The "large" Tree Duck was noted at Lubungan, northern Mindanao, February 14, 1904.

Captain Coffin, Commandant of the naval station at Pallok, southern Mindanao, showed me in his quite extensive aviary, a large flock of Tree Ducks that Moros had caught young. One of them (No. 13394 ♂ juv.) had died, and was added to my collection.

arcuata Horsfield.

119. Dendrocygna, all species. Philippine Islands.

Señor Mariano de Leon, Presidente of the island of Cagayan Sulu, P. I., says there are no wild Ducks on that island.

A young specimen (No. 13394 ♂ juv.) was given me by Commander Frederick W. Coffin, U. S. Navy, March 2, 1904, at Pollok, Min=danao, where I saw a dozen more in the aviary of this officer. They made very attractive pets. The Moros trap them and sell them in their markets for food.

Noted at Kudarangan on the Rio Grande, Mindanao, March 6, 1904.

" between " and Barak " " " 7, ".

Very abundant at Sauir, on Lake Lanao, Mindanao, April 2, 1904.

Abundant at Sauir, on Lake Lanao and at Rogayan, Taraca Valley, Apr. 3, 1904.

Flocks were heard flying about and over our camp at Rogayan during the moonlight night of April 3-4, 1904. At Malungan, April 5, 1904, on Taraca River, flocks began to pass over our camp before daybreak, and continued until after down. Later, many of them were found feeding at the rivermouth. Noted as far up the Taraca River as Galauan, April 6, 1904. Noted on the Taraca River, from Galauan to Basayan (near Lake Lanao), and in great numbers at the latter place. "The Dendrocygna is the large, whitish-rumped species known to the Visayan Filipinos of Mindanao as "Pata Macma", the smaller species being their "Pata Monte." I have not seen the small one on Lake Lanao."

(Sheet III)

Dendrocygna arcuata Horsfield.

Philippine Tree-Duck or Teal.

General Wood and Capt. McCoy shot 20 at Sauir, on Lake Lanao, April 9 and 10, 1904, when hundreds were seen feeding in beds of water-lilies + lotus, and water-cabbages.

Noted at Isabella, Island of Basilan, January 19, 1904.

Some were shot by Captain Francis P. Sevier, 28th Infantry, ~~US~~ and Contract Surgeon John Hicks, U.S. Army, September 27, 1903, on Lake Lanao, Mindanao.

Many large flocks were seen on Lake Lanao, passing over at daybreak, September 28, 1903. In crossing from Marahui to Vicars, ~~on the~~ no Ducks were seen to alight on the open water.

Abundant at Malabang, Mindanao, Sept. 29 and Oct. 7-9, 1903.

Abundant at Lake Butig (south of Lake Lanao, Mindanao, October 5 and 6, 1903; also at Datto Grande's place, between Lake Butig and Vicars, Mindanao, October 6, 1903.

Lake Liguasan, Mindanao. — May 17, 1904: Innumerable flocks passed over the Lake during the early morning. Ducks breed in great numbers in these grass islands. The Moros sell the eggs, and search the floating grass ~~bogs~~ islands that drift down the Rio Grande during freshets for nests of eggs. Dendrocygna builds its nest in the grass. May 18: Almost all of the Ducks seen on the lake were of this species.

Dendrocygna arcuata Horsfield.
Philippine Tree-Duck or Teal.

Lake Liguasan, Mindanao, May 17 to 19, 1904.—Everywhere abundant except on open water. It likes the shallow lagoons in the marshes, which are its feeding-grounds.

May 20, 1904, on the Bulwan River, connecting lakes Bulwan and Liguasan, Mindanao, Many were seen. In fact this Duck was afterwards noted as exceedingly abundant on the Bulwan River, May 20 to 22, 1904. ~~Lieut~~ Captain Mc Coy ~~shot~~ killed six of them at one discharge.

Abundant in the marshes bordering Lake Bu=lwan, Mindanao, where General Wood and Bishop Brent killed seven, May 22, 1904; and great numbers were seen in descending the Bulwan River to Lake Liguasan, May 27, 1904. On the Rio Grande, from Lake Liguasan, May 28 ~~and~~ and 29, 1904, it was frequently seen, in smaller flocks.

In Luzon this species is snared or netted in great numbers, by natives, for the markets.

These ducks assemble in great flights after sunset and before sunrise. In camps I often heard them during the night. On the shores and points of land of inland lakes they assemble in daytime in such numbers as to give a distinct coloring to the shores.

Kah-ging'-King (Visayans of the Agusan River). (Sheet V.)

Dendrocygna arcuata Horsfield.

The aviary of Commander Frederick W. Coffin, U.S. Navy, at Pollok Naval Station, southern Mindanao, contained twelve of these ducks on March 2, 1904, which Moros had brought in from the immediate vicinity.

In crossing Lake Lanao, Sept. 28, 1903, though the shores were lined with these Ducks, none were seen upon the open waters of the Lake.

(Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904. Large flocks flew over Datto Elias Seranaya fort, March 10-12, 1904.

At daybreak thousands of these ducks flew overhead, on the Rio Grande at the mouth of the estero which drains the Seranaya March, March 11, 1904.

Some were shot on Lake Mainit, northeastern Mindanao, April 24, 1904; abundant on this lake.

I was informed that enormous flocks abound in the lakes of the middle Agusan Valley, Mindanao; but I saw no ducks at the time of my visit, May 8 and 9, 1904.

Jimenez, northern Mindanao, May 12, 1904: Abundant in flooded rice lands, where I shot 3. When mortally wounded, they dive and entangle themselves among the polygonum and grass and do not rise to the surface when dead.

(Sheet VI.)

Dendrocygna arcuata Horsfield.

Between Manila and Camp Gregg, along the Manila and Dagupan Railroad, this duck was seen at several places; also at Camp Gregg, in Pangasinan, July 29 and 30, 1905.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

About 20 were on Trinidad Lake, at about 4500 feet, in Benguet Province, Luzon, December 3, 1905.

Abundant on Paoay Lake, Ilocos Norte Province, Luzon, January 27, 1907; on February 5, 1907, flocks of hundreds were seen, and six shot, on Paoay Lake.

Ducks, probably this species were seen off the mouth of the Cagayan River, northern Luzon, May 26, 1907.

Aparri, northern Luzon, May 29, 1907.

Abundant at Casiguran, east coast of Luzon, June 1, 1907.

21 Were brought in from Manjan Lake, Mindoro, where the species was found in large flocks, March 25, 1907.

Flocks of many hundreds were seen near Captain Halstead Dorey's mapping camp, No. 4, on January 30, 1906. General Bliss, Capt. Dorey and myself subsequently visited this spot from a steamboat and made a good bag of this duck and Dendrocygna guttulata.

At La Mitan, Basilan Island, Febr. 4, 1906, Mr. J. M. Browne, Deputy Governor of Basilan, showed me 11 ducks, raised from 11 eggs found in a nest in a ricefield. They were then 1/3 grown.

(Sheet VII.)

Dendrocygna arcuata Horsfield.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Near Isabella, north Basilan, Feb. 21, 1906.

Viet Lake, Sulu Island, March 2, 1906.

Of ducks shot on a marsh of West Basilan Island, March 3, 1906, were this species, and the remainder Dendrocygna guttulata.

At Cebu, we heard of immense flocks of ducks on the neighboring island of Mactan; so we procured boats and a guide, and set out, on September 3, 1906, for an afternoons sport; but, after wading through muddy mangrove swamps, and crossing the island, we found just 3 ducks of this species in some rocky tanks near the village of Opon.

Two were seen to alight on Bisucay Island, near Cuyo Island, in the Sulu Sea, September 10, 1906.

Taytay, Rizal Province, Luzon, September 21, 1906.

191. Anas luzonica Fraser.
'Dusky' Mallard (of the Americans).
Tam-ah-goar' (Moros of Lake Lanao). No 12959 Gad.
Philippine Mallard.

This species is very abundant on Lake Lanao and the bordering marshes. I saw some of them on lakes Liguasan and Buluan, and great numbers of them in the swamps and marshes bordering the Buluan River, which connects these two lakes.

April 2, 1904. I saw hundreds of them at Sauir on Lake Lanao, Mindanao. One was shot and eaten. Its throat was filled with fresh-water univalves the size of grapes; 3 [illegible] Numerous from Bouir, on Lake Lanao, to Kiguaque, in the Tawalli valley, April [illegible]

Flocks of Dusky Mallards flew over our camp at Pagayan during the bright moonlit night of April 3-4, 1904. At Valungan and the lower part of the Taraca River, many. Above were seen on April 5, 1904, especially at dawn. Noted April 8, 1904, between Galanan and Basayan, on the Taraca River; and three were shot at Basayan, near Pagayan and Lake Lanao, by Captain Frank K. McCoy. We saw many flocks and noted that its flight is like that of Anas boschas. Abundant at Sauir, on Lake Lanao April 9 & 10, 1904, when Lieut. Wood shot two at one shot, and others were killed. Could be distinguished in flight by the pure white of under side of wing.

121 Anas luzonica Fraser. Philippine Mallard.

Some were shot by Captain Francis P. Sinclair, 28th Infantry, and Contract Surgeon John Hicks, on Lake Lanao, Mindanao, September 27, 1903.

One shot, many seen, at Lake Buliig, south of Lake Lanao, Mindanao, October 5, 1903; noted at Datto Grande's place, between Lake Buliig and Uscars, October 6, 1903.

Lake Liguasan, Mindanao.—May 17 to 19, 1904. Noted in very small numbers, flying over the lake; much more abundant on the Buluan River, connecting Lake Liguasan with Lake Buluan, May 20 to 22, 1904. It was not uncommon on Lake Buluan, May 22, 1904, where one flock of six and many others were seen; and, in returning down the Buluan River to Lake Liguasan, May 27, 1904, a great number of these ducks were seen.

Seranaya Marsh, Rio Grande Valley, Mindanao, March 8–12, 1904.

Noted on the Rio Grande, at the mouth of the estero which drains the Seranaya Marsh, March 11, 1904.

This species is said to abound on the great lakes of the middle Cagayan Valley, Mindanao; but at the time of my visit (May 5 and 7, 1904), no ducks of any kind were seen, although wading birds were very numerous.

Manila to Camp Gregg, on the Manila and Dagupan Railroad, and at Camp Gregg, July 29 and 30, 1905. Pangasinan province.

(Sheet III.)

Anas luzonica Fraser.

San Pedro, Nueva Ecija Province, Luzon, Nov. 24, 19[illegible]

Pasig River, near Padsan, Ilocos Norte, Luzon, Jan. 17, 1907.

Two shot on Paoay Lake, Ilocos Norte Province Luzon, January 27, 1907. Hundreds of these ducks were seen on Paoay Lake a shut of fresh water near the sea probably measuring 10 to 12 miles in circumference. Quacks like tame duck. They were equally abundant on February 3, 1907, when the natives (Ilocanos) tried to persuade us to buy a lot of live ones. They net them in great abundance, at night, on the lake.

Three near Pasuquin, Ilocos Norte, Luzon, February 15, 1907.

Abundant in Darigayo Lake, do " 20, ",

when Sereaco brought in 3. do

Abundant at Agraga, do March 5, 1907.

On May 6, 1907, Mr. William Dow Carpenter shot one of a flock, on Trinidad Lake, Benguet Province, Luzon, which was in an camp on the Magillan River above Magillan, Luzon, May March 19 and 20, 1907.

Aparri, northern Luzon, May 29, 1907.

Abundant at Casiguran, east coast of Luzon, June 1, 1907.

126 (Plotus melanogaster (Forster).

Indian Snake-Bird or Darter.

Many were seen, February 16, 1904, on the lowest portion of two rivers that enter Sarangani Bay, northern Mindanao, at the Subano village of Mucas.

Many were seen at Sevir, on Lake Lanao, April 2 and 5; also April 9 and 10, 1904, when returning to Camp Vicars.

I saw some Darters on the Agus River at the Pantar bridge, September 27, 1903; and Captain Francis P. Vigiter and Contract Surgeon Hicks shot one on Lake Lanao, Mindanao the same day.

Several were seen on Lake Lanao, Mindanao (altitude 2000 feet), September 28 1903. One pair sat on a rock in the lake, others on trees beside it.

Mr. Fletcher L. Keller saw this species on the Davao River, southern Mindanao.

Several seen, and one shot and eaten, at Lake Butig, south of Lake Lanao, Mindanao, October 5 and 6, 1903.

Abundant on Lake Liguasan, Mindanao, May 17 to , 1904. On May 18, "a Snake-bird rose to the surface of the lake, in front of my barrota, with a ~~big~~ rather slender fish perhaps 8 inches in length wriggling in its bill. The Snake-bird tossed the fish up in the air and caught

(Plotus melanogaster (Forster).
Indian Darter or Snake-bird.

it and tried to swallow it; but the fish twisted out and had to be tossed up again. This time it got away and fell into the water. The Snake-bird followed it under water and caught it under water, and, on coming up to the surface immediately arose in the air and flew away with the fish in its beak

Lake Liguasan, Mindanao, May 18, 1904.—The Snake-bird, on alighting ~~in the water~~ disappears all but its head and long neck, which rises, serpentine, above the water. When frightened, it carefully withdraws its wings from the water and immediately rises. Large fishes ~~and~~ are swallowed entire. When rising to the surface with them it holds the fish crosswise in its beak, then tosses it up, catches it headfirst and swallows it. May 19: "Snake-birds were everywhere abundant."

On the Buluan River, connecting lakes Buluan and Liguasan, May 20 to 23, 1904, the Snake-bird was found in abundance. Its flight—by alternating flapping and soaring—is just like that of the Florida Snake-bird; returning, from Buluan to Lake Liguasan, May 27, 1904, it was likewise abundant.

Abundant on Lake Buluan, Mindanao, May 22, 1904.
Abundant on Agus River at Pantar, Mindanao during August & Sept., 1903.

(Sheet III.)

Plotus melanogaster (Forster).

Indian Darter or Snake-bird.

In descending the Rio Grande, from Lake Liguasan to the rivermouth, May 28 and 29, 1904, it was seen in abundance.

Tubay River, N. Mindanao. — April 22: "One."

Libungan River, near Sabas, Mindanao, March 13 1904.

As we paddled down the Tubay River, from Gabanga, on Lake Mainit, to Santiago, (Northern Mindanao, April 22-24, 1904) Water Turkeys sat with wings akimbo. On Lake Mainit and the Tubay River, April 22-24, 1904, the Snake Bird was very abundant everywhere. Sat on stakes and snags and sometimes on high trees, drying wings. Tumbled into water, and swam with only head and neck out. But few males in breeding plumage seen.

On leaving Cotabato, on a 5-day trip down the Agusan River to Butuan, Mindanao, May 5, 1904, the first bird noted was a snake bird.

Abundant at Gatuia, on the Agusan River, Mindanao, May 6 and 7, 1904.

Abundant on the Agusan from Gatuia to Patrocino, May 7, 1904.

Varicella, on the Agusan River, Mindanao, May 7 and 8, 1904.

Numerous on Lake Linao and thence to Talacogon on the Agusan River, Mindanao, May 9, 1904

(Sheet IV.)

(Plotus melanogaster (Forster).

One was shot, January 17, 1907, on the bank of the Laoag River, near Padsan, Ilocos Norte, Luzon, January 17, 1907.

This should stand: Anhinga melanogaster (Pennant), Indian Zoology, 1769

Anhinga melanogaster Pennant, ~~Indische Zoologie, 1781~~, Indian Zoology, 1769, p. 13, pl. XII.

Anhinga melanogaster Pennant, Indian Zoology, 1769, p. 13, pl. XII.

Or:—

Plotus melanogaster (Pennant), Indian Zoology, 1769, p. 13, pl. XII.

Anhinga is one of Brisson's genera.

One seen off Aparri, northern Luzon, May 26, 1906.

Aparri, northern Luzon, May 24, 1906.

Sibi, southeastern Luzon, [illegible]

Very abundant on Nanjan Lake and its outlet the Nanjan River, March 25, 1907. Its habits are like those of the American species in Florida. It utters a rough note, rarely, during flight. A number were shot.

Several were seen on the lower Cotael River, east Mindanao, October 5, 1906.

Dr. Jesse R. Harris, Assistant Surgeon, U.S. Army, showed me the skin of one collected on a stream in the vicinity of Parang Parang, southern Mindanao, in 1906.

Birds.

No. 13736. x Sula ♂ ad.

Aug. 12, 1904. While sailing from Jolo on the island of Sulu toward Iloilo, when in sight of the island of Negros, this Booby or Gannet alighted on the after davit, port side, of the U. S. Army Transport Protens. After dark a Filipino sailor was sent up by Captain Möller to catch it as it slept. When caught it utered loud squawking cries. When brought into the after saloon it promptly discharged the contents of its gullet upon a table. Its gullet was full of young squid. Iris yellow. Bill slate-black. Face and gular pouch pale blue, greenish on the lower eyelid, which is flesh color in life. Feet orange, paler on tarsi; claws whitish at base, shading to horn color at tip. Tail-feathers 12 short, with a single long central rectrix. Measurements: 693; 1400; 374; 225; 81 (height at base, 27); 37; 73 mm. The bird was thin. It flew over the ship many times before alighting on the davit. It had a companion that did not try to come aboard. Several others were seen during the day. Also a Blue-and-white Kingfisher that alighted on the ship and one ~~Long-tailed~~ Chelidon or Swift — the first migrant seen — that flew around the ship but did not alight. Swifts seen in passing the island of Mindoro (east side).

~~Lysporus~~

Blue-faced Booby or Booby.

Red-footed Booby.

One seen on the Sulu Sea, between Zamboanga and Cagayan Sulu Island, P. I., February 24, 1904. Returning, February 27, three more were noted.

August 6, 1905, one was seen flying over the city of Manila. It became entangled in some overhead wires but extricated itself and disappeared.

Three white Boobies were seen, 2 October 25, 1905, between Iloilo, Panay and Bacolod, Negros.

Very many, adult and young, were seen on the Celebes Sea, off south Mindanao, October 9, 1906.

Off east coast of Sulu Island, March 2, 1906.

Between Zamboanga and Jolo, on the Sulu Sea, flying northward, March 8, 1906.

Flocks were seen on the east arm of the Sulu Sea, between Mindanao and Sulu Islands, September 2, 1906.

Of Abbott's adult birds the female is the largest.

Sula piscator (Linnaeus).

Adults are white all over, ~~with~~ except dark-tipped wings.

Young ~~are at~~ in first plumage are dark throughout, but paler below — whitish on crissum, with a dark band [illegible] the chest.

Later the tail, [illegible]-coverts, rump, flanks and crissum all change to white, the rest of the body remaining dark, the anterior two-thirds being dark and the [illegible] white.

Later the head and belly become whitish, with remains of the dark sides & pectoral band visible.

Abbott's adults, from the Indian Ocean, have the soft parts colored as follows:

"128767. ♂ad. Providence Island, 300 miles S.W. of Seychelles, Aug. 13, 1892. L. 28 3/4. Feet red, toes pink. Bill pale blue, base of lower mandible brick red. Chin black, Forehead red } bare skin. Irides dark brown. Nests in large numbers upon the island, building upon casuarina trees."

"128772. ♀ad. Ile St. Joseph Amirante group, S.W. of Seychelles. Native name Houbett. L. 29 1/2. Bill pale blue, base of forehead pink. Feet red, claws horn-blue. Orbital skin light blue, gular pouch black. Irides [illegible]. Female lays one egg, chalky white. Breeds on this island in thousands.

II

Colors of Abbott's specimens of Sula piscator: —

No. 128769. ♀. All dark. Providence Island, 300 miles S.W. of Seychelles, Aug. 20, 1892. Tarsi white. Webs reddish. Bill black. Gular pouch light-blue. L. 28½. Common (Creole) name, Foubette."

"No. 128773. All dark. Aldabra Island, Indian Ocean, Aug. 20, 1892. Creole name Fou bête. Young of small white booby."

"No. 128774. ♂. Head & breast dark; tail rump and crissum (hinder third of body) white. [Indian Ocean, N.W. of Madagascar. Dr. Abbott.]
"Ile Glorieuse, Indian Ocean Jan. 18, 1893. L. 28½. Bill pale yellowish; base of lower mandible pink; forehead red; orbital skin blue; gular pouch black; feet brick red; irides blackish.

No. 128770. ♂. Same plumage as above. Same place. Jan. 18, 1893. Irides blackish. Feet brick red. Bill pale yellowish, base of lower mandible pink. Length 29½. Orbital skin blue. Forehead red.

(Colors of Ad[illegible] *Sula piscator* Specimens.)

No. 128771. ♂. Same [illegible] as last two (posterior, third white). Gloriosa Island, Indian Ocean, Jan. 26, 1893. L. 27 5/8 E. 57 1/2. Bill pale blue; fo[illegible] red; base of lower mandible pale reddish; orbital skin blue; sides blackish; gular pouch black; feet brick red, claws purplish white.

Sula piscator Linnaeus was based on Brisson's Le Fou blanc (Orn. VI, p. 501, 1760)
Sula candida Steph. in Shaw's General Zoology, XIII, pt. 1, p. 103 (1826).
Sula erythrorhyncha Lesson, Traité d'[illegible], p. 601, 1831.
[Look this up.]

Dysporus hernandezi Gundlach, J. f. O. 18[illegible], p. 298 [Cuba]; 1881, p. 401.

Sula coryi Maynard, Contr. Sci. I, pp. 40-48, pp. 51-57, pl. V, figs. 1, 2, pp. 142-143, pl. XII (...).
Cayman Brac & Little Cayman [, W. I.?].

Sula rubripes Gould, ~~B. Australia, VII, pt. [illegible] pl. 79, 1846~~ P. Z. S., 1837, p. 156 (New South Wales).

Sula brasiliensis Reichenbach, ~~Av. Syst. [illegible], p. VI, 1852~~ (nec Spix) Natalorns, pl. XXIX, no. 851, 1850

Dysporus Piscatorius (Gmelin)
Booby; Gannet.

Two days out from the island of Guam enroute to Manila, P. I., July 23, 1903, one Booby was sighted.

One Booby was seen on the Celebes Sea, off southern Mindanao, between Illan and Zamboanga, October 27, 1903.

Between Dapitan and Zamboanga, off northwestern Mindanao, May 14, 1904, one was floating on the waves ahead of the Ranger, at sunrise, when Captain Anderson tried to shoot it for me; but the Booby flew too soon. One or two others were seen between Dapitan and Zamboanga, May 14, 1904.

One white-bellied Dula [illegible] off Baler, east coast of Luzon, June 2, 1905.

One white bellied Dula was seen off southern Mindanao, January 20, 1906, in the Celebes Sea.

In the Celebes Sea, off southern Mindanao, between the Sarangani Islands and Zamboanga, January 24, 1906, I saw from 100 to 200 white-bellied boobies.

Isabella, Basilan to Zamboanga, Mindanao, in Basilan Straits, February 22, 1906.

(Sheet II.)

Sula leucogaster Boddaert.

Abundant on the ~~Sulu~~ Celebes Sea, off south Mindanao, October 9, 1906.

"Many" ~~were~~ noted in the Sulu Sea, off the east coast of Palawan Island, October 18, 1906.

Manila Bay, off Corregidor Island, December 16, 1906.

Bolod Islands to Balut Balut Island, Sulu Sea, January 10, 11, 1906.

Off east coast of Sulu Island, March 2, 1906.

Between Zamboanga and Jolo, on the Sulu Sea, flying northward, March 8, 1906.

Many seen on the Celebes Sea off south Mindanao, between Zamboanga and Margosatubig, March 13, 1906; between Malabang and Parang Parang, March 14, 1906; off Parang Parang, March 14, 1906; between Parang Parang and Cotabato, March 14, 1906

Steaming west from Malabang, on the Celebes Sea, southern Mindanao, March 15, 1906, one booby was the only bird seen during daylight; at daybreak, March 16, 1906, they were abundant until we reached Zamboanga.

No Boobies were seen on trip from Zamboanga to Manila and returning, July 8 to 27, 1906.

A good many white-breasted Boobies were noted

(Sheet III.)

Sula leucogaster Boddaert.

in the Sulu Sea off northwestern Mindanao, between Zamboanga and Camp Overton, May 6, 1906.

(Sheet III.)

Sula leucogaster Boddaert

Left Zamboanga, Mindanao June 9, 1904, for Malí, southeastern Mindanao. During the forenoon of June 10, 1904, in the Celebes Sea off south Mindanao, an occasional pair of Gannets or "Boobys", as the sailors called them, were the only birds visible. At 10:30 a.m. a pair of these Gannets continually circled about the ship. Their flight is somewhat like a Gull's; but the yellow feet, whitish bill, and wedge-shaped tail served to distinguish them readily. After being fired at, they again returned to the ship, and one was shot. Stopping the ship, the Captain ordered a Malay sailor to jump overboard and get it, which the native did with a right good will: No. 13491, ♂ad. Killed on the Celebes Sea, in longitude 124° E, latitude 6° 6.45 N, off (S.W. 9 miles) Kanipan Banks, S. Mindanao, P. I., June 10, 1904. Length, 775; alar expanse, 1460; wing, 390; tail, 240; culmen (chord), 102; depth of bill at base, 31; tarsus, 117; middle toe with its claw, 80. Iris brownish gray, with a white external ring. Bill yellowish white, dusky at extreme tip, where it is more olivaceous above and more grayish below. Bare skin of face, and pouch, pale yellow,

Sula leucogaster Boddaert.

except that the eyelids and space in front of eye are plumbeous. Feet plain, pale greenish yellow, without dusky markings or shading. Claws grayish horn color. The individual was molting, with quill-feathers much faded and frayed by wearing. Whole alimentary tract preserved in alcohol.

128. Fregata minor (Gmelin).
Lesser Frigate Bird.
Fregata ariel (Gould).
Smaller Frigate-bird.

On August 9, 1903, several Frigate Birds were seen on the Sulu Sea, off the north coast of Mindanao, between Zamboanga and Sapitan.

One was seen off shore, when riding from Jaglibi to Jolo, November 21, 1903. Jolo, Sulu, November 21-26, 1903.

Between Jolo, Sulu and Papa Island, P. I., November 25, 1903, some Frigate Birds were seen.

"Also five were seen together, on the Sulu Sea, near Jolo, Sulu Island, P. I., March 26, 1906.

Two, soaring high in air, off the southern part of Libutu Island, in the Sulu Sea, January 5, 1[illegible]

Not seen January 21, 1906, when I first visited Palawan Island; but, on October 7, 1906, I saw a pair of Frigates soaring over the native village.

Two, off mouth of La Milan River, Basilan, Feb. 4, 1906.

En route from Balut Island to Zamboanga, on the Celebes Sea, October 9, 1906, a flock of Frigates was seen.

While ashore at Cagayan Sulu Island, Oct. 15, 1906, I saw a flock of Frigates flying overhead.

Fregata minor (Gmelin).
Fregata ariel (Gould).

A flock of 12 was noted off north Palawan, September 13, 1906.

Saw one Fregata in Sulu Sea off N.W. Mindanao, July 8, 1906.

(Sheet II.)

Fregata minor (Gmelin).

Fregata ariel (Gould).

A large flock of Frigates passed over the Mindanao, anchored off Lumbucan Island, October 16, 1906.

Noted at Balambing, Tawi Tawi Island, January 6, 1906.

Eleven Frigate Birds flew past my quarters at Zamboanga, on the north shore of Basilan Straits, which connecting the Sulu and Celebes seas, on March 7, 1906; all were flying towards the Celebes Sea. I had ~~never~~ not previously seen quite so many together.

One seen off north Basilan, in Basilan Straits, March 3, 1906.

Off south and east coasts of Sulu Island, March 1 & 2, 1906.

Between Zamboanga and Jolo, on the Sulu Sea, flying northward, March 8, 1906.

Many seen on the Celebes Sea off south Mindanao, between Zamboanga and Margosatubig, March 13, 1906; between Malabang and Parang Parang, March 14, 1906; off Parang Parang, March 14, 1906.

Many seen, August 16, 1906, at the entrance to Dumanquilas Bay, southern Mindanao.

Off Pangpang, Dumanquilas Bay, southern Mindanao, Aug. 17, 1906.

Surral off Cuyo Island, Sulu Sea, September 10, 1906.

127. Pelecanus rufescens Gmelin.
Pelican.

Pelecanus philippensis Gmelin.
Spotted-billed Pelican.

I was informed that this species bred and was not infrequently observed near Camp Gregg, Luzon. I saw none on Lake Lanao, Mindanao during the years 1903 and 1904.

Lake Liguasan, Mindanao. — May 17, 1904: "Gray-and-white Pelicans are said to be numerous on the lake. I have not seen them yet." "On entering a larger open space in the lake, we found two very tame Pelicans. When our little steamboat turned and steamed straight towards the pair, the Pelicans swam away and soon arose from the water, separately, and flew away, appearing as gray birds with white tails when flying from us. May 18: Four Pelicans seen. On the water these birds are quite majestic creatures. They are not very shy birds, and I had no difficulty in being paddled within shotgun range of them, in a Moro vinta; but, although I shot twice at them, I did not kill one. May 19: "The Pelicans have been shot at a good deal and have become more shy. None have been

Pelecanus philippensis Gmelin. ♀ ad.

Iris pale yellowish. Bare space surrounding eye pale brownish yellow becoming flesh color in a broad circle ~~surround~~ next to the eye. Bill with maxilla flesh color, faintly lined with reddish brown laterally and terminally, and with about 20 very irregular brown spots along sides; nail at tip of maxilla yellow; mandible flesh color on basal half, mottled with purplish on subterminal fourth, becoming yellow at tip. Bare skin at base of bill and pouch purplish gray (more gray posteriorly and purplish anteriorly) mottled with blackish, especially on lowest part, and below base of bill; bluish and silvery white elevations form chains of longitudinal spots. Legs and feet plumbeous; claws olivaceous horn color. Weight 9¼ pounds avoirdupois.

~~culmen~~ chord 300 mm. greatest width, 38; least width, near base, 28; length of terminal nail, 27; longest occipital feather 82;

length 1350; wing 540; tail 200; alar expanse 2130; tarsus, 85; mid toe & cl. 117; hallux with cl. 55; claws: 1st (hallux), 17; 15; 17; 15 (outer). Anteroposterior diameter of tarsus, 27. Stomach empty. Contained an egg measuring 32 mm. in diameter. 20 tail feathers.

Pelecanus fuscescens Gmelin.
Spotted-billed Pelican.

killed outright. I do not think that more than ten were on Lake Liguasan during my visit (May 17 to 19, 1904).

During the following winter, 1st Lieutenant Gerrit Van S. Luckenbush, 23rd Infantry, U.S. Army, wrote me from Cabaxalon Island, in the Rio Grande, at the outlet of Lake Liguasan, that Pelicans had been quite common in that vicinity. He also saw one on the Rio Grande at Cudarangan about Dec. 15, 1904.

Lake Buluan, Mindanao, May 22, 1904. — "Pair of Pelicans swimming a little way from shore." Several pairs were seen, later in the day, and it was noted that they avoided the central part of the lake.

Lake Liguasan, May 27 and 28, 1904. — "Pelicans all along shore."

An officer who was stationed at Camp Gregg, Pangasinan, Luzon, for 14 months, informed me that pelicans are not uncommon in Pangasinan, and said that two large downy young ones had been brought to him at Camp Gregg.

Doctor Jacob M. Coffin, U. S. Army, saw two pairs of pelicans on the Rio Grande de Mindanao, at Piquit, September 22, 1905.

Petrels

On July 24, 1903, ~~three~~ two days out from Guam, going towards Manila, several small dark Petrels were met. One was seen on the following day.

Albatross notes.

Captain Pfort, Master of the U.S.A.T. "Romeo" gave me the following:

From the British ship "Gladstone" sailing from England to Sydney, Australia, in 1882, a ~~soldier~~ sailor fell overboard. A big Albatross swooped down, and the sailor caught it and held on until rescued, when the Albatross was found to be dead.

129. Circus spilonotus Kaup.
"Oriental Marsh-Harrier.

Noted from Malungan to the mouth of the Tamea River, April 5, 1904.
Abundant at Pantar and Mazatui in Aug & Sept, 1
Two Harriers were noted on the Rio Grande, Mindanao, October 19, 1903.
Harriers were seen on the island of Sulu, from Hassan's to Upa's residence, November 14. One was shot for the collection (No. 131519 ad.), at ~~Jolo~~ Jolo, November 21, 1903, by General Wood.
Noted on the Cabasaran River, southern Mindanao, Jan. 31, 1904.
Several seen on the island of Sulu, February 21, 1904, between Datto Upa's residence and his market at Bual.
Captain H. R. McCoy, U. S. Army, noted this Harrier in the Alip River Valley, southern Mindanao, about the end of May, 1904.
Noted at Cotabato, Rio Grande Valley, southern Mindanao, March 3 to 5, 1904.
" " Kudarangan, " " " " 6, "
Noted from Malabang to Camp Vicars (0–3000 feet), Mindanao, March 31, 1904.
From Camp Vicars to Sauir, on L. Lanao, several were noted April 2, "
and from Sauir to Rogayan, in the Tamea Valley, April 3, 1904. This and the melanoleucus were frequently noted in the Lake Lanao Basin April 1 to , 1904

(Sheet II.)

127. Circus spilonotus Kaup.

Oriental Marsh-Harrier.

April 10, 1904. - Sauirto Camp, Vicars, Mindanao: "Harriers, gray, and gray-and-black" were noted.

Two pale gray Harriers were seen on Lake Liguasan, Mindanao, May 17, 1904.

September 15, 1905, I saw one near the ~~suburb~~ Malate, a suburb of Manila, Luzon.

A number were seen, in descending the Rio Grande from Liguasan to the rivermouth, May 27 and 28, 1904.

Lucena to Lingao, Hocos Norte Province, Luzon, Jan. 16, 1907.
Lingao to Pidsan, Hocos Norte Province, Luzon, January 17, 1907.
Several between Sang and Nagpartian, etc. Feb. 15, 1907.
A gray harrier was often seen about Nagpartian, Hocos Norte, Luzon, Febr. 15 to March 4, 1907.

Specimen No. 14300, was brought me, in August 1906, at Zamboanga, Mindanao, by Captain George T. Langhorne, U.S.A.

(Sheet III.)

Circus melanoleucos (Pennant).

"Circus melanoleucus (Hodgs.)," in current use, is wrong. See Allen, Bull. Am. Mus. Nat. Hist., XXIV, 1908, p. 114.

Falco melanoleucos Pennant, Indian Zoology, 1769, p. 2, pl. II.

Two noted on the slope of Mount Mayon, at the altitude of 2,500 feet, Legaspi side, Albay Province, Luzon, March 28, 1907.

Base of Mount Mayon, Tobaco side, Albay Province, Luzon, [illegible]

Tipu Tipu, interior of Basilan Island, February 15, [illegible]

Tipu Tipu to the Gumahobang River, Basilan, Feb. 16, [illegible]

Between the Gumahobang River and Camp No. 4, south Basilan, February 16, [illegible]

Buli Buli River to Camp No. 3, south Basilan, February [illegible]

Sulu Island, from Jolo to Maimbun, Buddajo, Coralee Lake, and Viet Lake, March 1 and 2, 1906.

At Tagulaya, on the west shore of the Gulf of Davao, June 14, 1904, I noted: "The Black and-gray Harrier is here in abundance upon the cogonals; but I saw none to-day."

"Governor Bolton told me that Mr. John Waterstradt had seen them, and been very anxious to secure a specimen."

130. Circus ~~aeruginosus (Linnaeus)~~ melanoleucus (Horsfield).
Pied Harrier.

Abundant at Pantar and Mamburao in August & Sept., 1903.

Two Harriers were noted on the Rio Grande, Mindanao, October 19, 1903.

Governor Bolton reported this species from the cogonals bordering the Gulf of Davao, Mindanao.

When circling Lake Lanao on the north during the first week of November, 1903, this beautiful Harrier was abundant.

Several gray Harriers were seen on the island of Sulu, November 17-26, 1903. A specimen was shot for the collection, by General Wood, at Jolo, Sulu, Nov. 26. I think I saw both spilonotus and melanoleucus. Seen at Jolo, Sulu, November 21-26, 1903.

Noted on the Cabasaran River, southern Mindanao, Jan. 30, 1904.

A black-and-white Harrier was noted at Iligan, northern Mindanao, February 15, 1904.

"Black-and-white Harriers" were noted on the island of Sulu, P.I., February 21, 1904, between Dalto Alpas residence and his market at Bual.

130. Circus melanoleucus (Forster), [illegible]

Captain H. B. McCoy, 3d Cavalry, U. D. C. noted the presence of this Harrier on the Davao slope of the mountain divide between Lake Buluan and the Gulf of Davao.

Noted at Cottabato, Rio Grande Valley, Mindanao, March 3–5, 1904.

" " Kudarangan, " " " 6, "

Noted in the Taraca Valley, Lake Lanao Basin, April 3 to 9, 1904; and between Sauir, on Lake Lanao and Camp Vicars, April 10, 1904.

Some were seen in descending from Lake Lignasan to the mouth of the Rio Grande, May 28 and 29, 1904.

One seen at Mercedes, 9 m. E. of Zamboanga, March 28, 1906.

A common species at Pantar, Mindanao (altitude 1800 feet) during August and September, 1903.

On the broad swamp of coastal country extending from the Dorranaya Marsh to the upper Libungan River, east of Cotabato, southern Mindanao, many of these beautiful Harriers were seen, March 12 and 13, 1904.

Pinugs to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904.

Camp Hotzenburg, Luzon, November 25, 1905.

Pozorrubio, Pangasinan Province, Luzon, Nov. 30, 1905.

Trinidad, Benguet Province, Luzon, Dec. 3, 1905.

Bued River Canyon to ~~Baguio~~ Baguio, Luzon, [illegible]

131. *Circus aeruginosus* (Linnaeus).
Marsh-Harrier.

Two were seen in the Lasag Valley, Province Lasag, January 20 and 22, 1907. Ilocos Norte Province, Luzon.
A Harrier, ~~perhaps~~ of this species (No. 13322), killed on the island of Cagayan Sulu, P. I., Feb. 26, 1907.
A number were seen on the island. Some were gray, others brown — two species?
Two between Lasag and Magpartian, Ilocos Norte, Luzon, Feb. 15, 1907.
Pair, near Pozorrubio, Pangasinan, Luzon, Dec. 23, 1906.
Naylay, Rizal Province, Luzon, September 21, 1906.

(Sheet I.)

132. Astur soloensis (Latham).
Horsfield's Short-toed Goshawk.

These very noisy birds were seen several times, near Camp Pantar, Mindanao in 1903.
Mr. Robb's specimen came from the mountains back of Zamboanga.
One seen in Fort Santiago, Manila, November 2, 1905.
Two at Camp Johnston, Benguet, Luzon December 28, 1906.
"Nol. It was Astur soloensis that (had a nest?) lived near Pantar (altitude 1800 feet), in August, 1903.
Mamuk Manka Island, January 6, 1906.

(Sheet I)

Kah-peep-mai'-yah, Bagobos of Mount Apo, Mindanao.

Accipiter manillensis Gmelin.

Manila Sparrow-Hawk.

Two are seen at Magsaysay, Ilocos Norte Province, Luzon, during the first week of March, 1904.

Noted at Pantar, in August and September, 1903.

A Sparrow Hawk was occasionally seen on the north side of Lake Lanao, from Camp Keams to the Romagon River, during the first week of November, 1903.

Seen on Mt. Sulieman, island of Sulu, November 20, 1903.

Noted at Buldung, miles northeast of Parang, Mindanao October 1, 1903.

Baguio, Benguet Province, Luzon, December ~~1 to 12~~ 5, 1905.

One seen near Sipa Sipa, in the interior of Basilan Island, February 3, 1906.

One seen, on Sulu Island, near Jolo, Oct. 11, 1906.

~~Mount Mauka Island, January 6, 1906 (apparently this species).~~

(Sheet I.)

Accipiter gularis (Temminck and Schlegel).

Alag River, Mindoro, Nov. 7, 1906. Standing in the forest gloom, one of these hawks skimmed silently to a perch near enough for me to shoot it.

148. Pithecophaga jefferyi, Grant.
Monkey-eating Eagle.
Monkey-eating Forest-Eagle.

Contract Surgeon Geo. Hicks, U.S. Army, and others, informed me that an immense Eagle that "wore its head feathers pomp", was brought wounded to Camp Pantar (altitude ~~1800~~ 1907 feet) near Lake Lanao, early in the year 1903. The bird died, and was not preserved. Dr. Hicks was familiar with the Sea Eagle which is numerous in that region.

A pair of Monkey-eating Eagles was seen at Bula, on Sarangani Bay, southern Mindanao, October 26, 1903. These. These fine Eagles were not particularly wild and occasionally alighted on dead tree-tops; but we had no large shot and otherwise so were unprepared to deal with such large game.

Mount Apo at 4000 ft., June 7 July, 1904.

Specimen sent by Mr. Frederick R. Keller of Davao, Davao, Mindanao.

Camp Overton, Mindanao, P.I.

August 15, 1907.

Major Edgar A. Mearns,

Medical Department,

Benguet, Luzon, P.I.

Sir:-

Ordnance Sergt. Horace W. Bivins, at this post has two Specimens of "The Monkey Eating Eagle". One dead, has been mounted; The other is alive and is a fine specimen.

I understand that this bird is rare, and commands a high price. He desires to dispose of both, and I thought that possibly due to the great interest you take in these matters you can give some advice as to whom he should apply relative to sale.

Trusting that I am not presuming too much upon your kindness.

I am yours truly,

L. W. Prunty

1st Lieut. 4th Cavalry.

Prunty

(Sheet II.)

Pithecophaga jefferyi Grant.

At Davao, Mindanao, January 22, 1906, I made the following note:

Mr. Keller's Monkey-eating Forest-Eagle was shot by an American soldier at the end of the village street, in Davao.

Mr. informed me that he had seen a letter from Baron Rothschild offering Dr. Good fellow $700.00, gold, for a good specimen of Pithecophaga jefferyi.

Dr. H. Newton Kierulff, Contract Surgeon, U.S. Army, showed me, August 16, 1906, the skin of one of these eagles that had been killed at Margosatubig, sometime previously; and First Lieutenant Benjamin Stark, Philippine Scouts, informed me that his native soldiers had brought in the head of another individual of the same species, a short time before, at Margosatubig, southern Mindanao.

In the museum of Santo Tomas College, Manila, on January 7, 1907, I saw two mounted specimens of Pithecophaga jefferyi Grant. "In Damar called Buag." One specimen was labelled "Damar," the other "Cagayan, Luzon."

Horace W. Bivins, Ordnance Sergeant, U.S. Army, wrote me under date of July 3, 1906, that he had in captivity a living individual, taken near Camp Overton, northern Mindanao.

Changeable Hawk-Eagle. (Sheet I.)

137. Spizaetus limnaëtus (Horsfield). April 21, 1904.

One was seen at Surigao, northeastern Mindanao, P.I.

Several were seen on the Agusan River between Compostella and Butuan, Mindanao, P.I.,

At Surigao, northeastern Mindanao, April 21, 1904, I shot a small bird on the edge of the town. The report alarmed a stupid Hawk-Eagle that flew from a tall bush only a few feet away from me. Its flight was very labored and slow.

Between Patrocino and Variella, on the Agusan River, Mindanao, May 7, 1904.

~~24 Ingaetus leucogaster (Horsfield).~~

146. Baza magnirostris Gray
Hooded Hawk-Eagle.

"Noted at Kudarangan, on the Rio Grande, Mindanao, as the "squalling Hawk."

Several were seen on the Agusan River, Mindanao, from Lake Linao to Talacogon, May 9, 1904.

One was seen, April 20, 1904, at Surigao, Mindanao. It flew from a small tree or leafy bush in a marsh at the edge of town.

139. ~~Spizaetus~~ Spilornis holospilus (Vigors).
Philippine Serpent-Eagle.

No. 13131. ? Spilornis holospilus (Vigors)? ♀ ad. Kamping, Bamla's place, Sulu Island, P. I., November 17, 1903. This ~~Hawk~~ sat stupidly on ~~the~~ a low branch of a tree in ~~an open~~ a sparsely-wooded cogonal, on Sulu Island. Its feathers were raised so that my companions supposed it to be an Owl. It was fiercely aggressive when wounded. Several others were seen on the island, one on Mt. Suleiman, Nov. 20. Others were noted between Soglibi and Jolo, November 21, and around Jolo, Sulu, November 21–26, 1903.

Mr. Robb's specimen came from Zamboanga (fide Robb, March 7, 1905).

It was seen between Sauir, on Lake Lanao, and Camp Vickers, April 10, 1904.

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

Several were noted as seen on Lake Mainit and the Tubay River, northern Mindanao, April 22–24, 1904.

Noted at Compostela, on the upper Agusan River, in the interior of Mindanao, May 5, 1904. Its note sounds like an exaggerated Wood Pewee's.

"Several" were noted, on the Agusan River from Lake Linao to Talacogon, Mindanao, May 9, 1904.

One near Pozorrubio, Pangasinan Province, Luzon, Dec. 14, 1905.

(Sheet II.)

(-) Spilornis holospilus (Vigors).

At Padsan, Ilocos Norte Province, Luzon, January 17, 1907, one flew past, screaming loudly.

Vintar Lake, Ilocos Norte Province, Luzon, January 24, 1907.

Several were seen about Naggarlan, Ilocos Norte Province, Luzon, February 15 to March 9, 1907; one shot Feb. 17th, another later. Sometimes seen in the shadow of the dense forest.

Seen one in the pine woods below Haughtie in the cols, northern Benguet, July 10, 1907. Mr. Haight has killed one at his place in the cols.

Pozorrubio, Pangasinan Province, Luzon, December 23, 1906.

Two Spaniards who came in from shooting at Sabaco, Albay Province, Luzon, March 29, 1907, had one.

On the trail from Baguio, Benguet to Camp Wallace, La Union, Luzon, a soldier fired twice at one on a tree between our camp on the Nagillian River and the town of Nagillian, ~~March~~ May 20, 1907.

One noted at Casiguran, east coast of Luzon, June 1, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Sabaco side, Albay Province, Luzon, June 4 and 5, 1907.

General Wood shot a female on the Naujan River, near Lake Naujan, Mindoro, March 25, 1907.

(Sheet III.)

Spilornis holospilus (Vigors).

A noisy pair was constantly flying about and alighting in a forest of Casuarina above Camp No. 3, on a ridge at 2250 feet altitude, Mindoro, November 8-12, 1906.

Several were seen between Tipu Tipu and Camp No. 8, in the interior of Basilan Island, February 3, 1906.

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Tipu Tipu, interior of Basilan Island, February 15, 1906.

Camp No. 3, near Tipu Tipu, to Camp No. 4, south Basilan, February 16, 1906.

Camp No. 7 to Camp No. 8, interior of west Basilan, Feb. 20, 1906; specimen No. 13964, ♀ ad., collected.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

At Burengo, on the Calubig River, north Samar, Oct. 1, 1906, one was soaring over the treetops crying loudly.

I wounded one on Bucas Island off northwest Mindanao, October 4, 1906. It was very dark in color.

At Manay, east Mindanao, October 6, 1906, I was attracted to one of these birds that perched upon a tall tree in the forest, by its note, a whining whistle that reminded me of the note of Penelopides. I shot the bird (No. 14387, ♀ ad.).

Jolo, on Sulu Island, March 1 and 2, 1906.

141. Butastur indicus (Gmelin).
Japanese White-eyed Buzzard-Eagle.

One seen at Pantar, Mindanao

Some were seen on wagon-road from Malabang to Camp Vicars, Mindanao, November 1, 1903.

This Hawk was seen on the island of Sulu, P. I, November 14, 1903, between Hassan's and Upa's residences.

Seen on the Cabasaran River, southern Mindanao, January 30, 1904.

On the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904, many of these Hawks were seen soaring overhead, or perched on the rocks or cocoanut trees. When in the forest its peculiar cry could be distinguished among the sounds of the woods. (Specimen No. 13386.)

Noted at Kudarangan, on the Rio Grande, Mindanao, March 6, 1904.

Noted along the road from Malabang to Camp Vicars (0 to 3000 feet), March 31, 1904.

April 10, 1904.— Saw on Lake Lanao to Camp Vicars, Mindanao: "Soaring above the cogon meadows were the usual number of Brahminy Kites and Harriers." Noted between Camp Vicars and Malabang, April 11, 1904. Numerous on Lake Lanao, Mindanao, September 28, 1903, when one was seen sitting beside a nest on a large tree on the margin of the lake.

141. Butastur indicus (Gmelin).
Philippine White-eyed Buzzard-Eagle.

Noted at Camp Vicars (altitude about 2900 feet), Mindanao, September 28 and 29, 1903; also noted as seen between Camp Vicars and Matalang Falls, Sept. 29, 1903.

Common on the Bacoco River, a tributary of the Agusan River, eastern Mindanao, May 4, 1904.

Numerous from Dingalé, on the Bacoco River, to Compostela, on the Agusan River, May 5, 1904.

Gativa to Talavano, Agusan River, Mindanao, May 7, 1904.

Numerous on the Agusan River from Lake Linao to Talacogon, Mindanao, May 9, 1904.

Dagupan and Bayambang, Pangasinan Province, Luzon, Dec. 15, 1906.

[On the Pasig River, Manila, January 12, 1907, were a great many Broahwing Kites.]

Ventar Lake, Ilocos Norte Province, Luzon, January 24, 1907.

Burdett Manganese Mine, do Febr. 19, 1907.

As early as August 3, 1907, descending from Heights-in-the-oaks to Baguio, at the altitude of 7000 feet, I shot an immature specimen (No. 15475 ♂ juv.), which was accidentally destroyed by fire at Baguio.

Iwo, near Twin Peaks, Luzon, December 25, 1906.

Mr. Edmunds, schoolteacher at Santo Domingo de Basco, Batan Island, P. I., told us that a Hawk, apparently this species, migrates to Batan in thousands during the month of October.

(Sheet No. III.)

Butastur indicus (Gmelin).

One shot near Henry Musser's ranch west of Isabella, Basilan Island, January 28, 1906. A pair together.

One seen Camp No. 3 to Camp No. 4, Basilan Island, January 30, 1906.

Camp No. 6 to Camp No. 7 (near Tipo Tipo, in the interior of Basilan Island, February 2, 1906.

Between Tipo Tipo and Camp No. 8, in the interior of Basilan Island, February 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

One on Bud Dajo Peak, Sulu Island, October 11, 1906.

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

Melville, Balabak Island, October 16, 1906.

Bona Bona, Tagbanoa village 15 miles from San Antonio Bay, east Palawan, October 17, 1906.

Sulu Island to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, when several were noted.

Pontoaëtus

142. ~~Haliaëtus~~ leucogaster (Gmelin).
White-~~bellied~~ breasted Sea Eagle.
White-bellied Sea-Eagle.

Noted at Malabang, southern Mindanao, March 31, 1904.

Capt. Sivirter shot one with a fish in its claws on [illegible]

A couple of large, fat, downy nestlings, taken from a tree on Lake Lanao, Mindanao, were seen in captivity at Camp Vicars.

When marching around the north half of Lake Lanao, during the first week of November, 1903, many Sea Eagles were seen and one shot.

Lieutenant Gerrit Van S. Luaskenbush, 17 Infty, U.S. Army, killed an Eagle, about 30 miles East of Zamboanga.

On the island of Sulu, P.I., this Sea Eagle was noted as follows: From the beach and Diet Lake, and at the residence of the Panglima, Hassan, November 13; abundant along the ten miles of beach from Taglibi to Jolo, November 21, 1903; seen daily flying over the walled city of Jolo and our adjacent camp, November 21-26, 1903. A tame one was kept in the city.

Noted on the island of Dungdung, off Sulu Island, P.I., November 25, 1903.

One on Bulwan Island, off southern Mindanao, Feb. 1, 1904.

Manaol (Moros of Siassi) [illegible]

142. ~~Haliaëtus~~ Pandion leucogaster (Gmelin).

Noted on the island of Banga (= Port Banga), off southern Mindanao, February 1, 1904.

Several were soaring over the wharf and town at Jolo, Sulu, February 4, 1904. One pursued a Kite and took a fish from it.

Noted at Camp Overton, northern Mindanao, Feb. 15, 1904.

A number were noted along the shore of Sulu Island, P. I., February 20, 1904.

Three were noted on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, P. I., February 21, 1904.

On the island of Cogayan Sulu, in the Sulu Sea, February 25, 1904, I noted: "Sea Eagles and Falcons continually soared over the highest cliffs, around which darted hundreds of pale-throated Swifts." Several were noted soaring over the Moro settlement during the day. On February 26, several were flying over a mountain, where I shot one at the top which fell wounded at the foot of a cliff where I could not find it.

In a list of ~~the~~ birds found on the island of Siassi, P. I., by Captain J. L. Smith, 17th Infantry, U.S. Army, are mentioned "Eagle (Three Kinds, the largest being known by the name of "Manaol)," the "Manaol" (Moro) doubtless referring to this species.

142. Haliaëëtus leucogaster (Gmelin).

On March 2, 1904, I saw one at Malabang, two at Pollok Naval Station, and several on the lower part of the Rio Grande, southern Mindanao.

Noted at Cottabato, Rio Grande Valley, Mindanao, March 3, 1904.

" between Kudarangan and Barak, " " " 7, " .

Noted at Camp Vicars, altitude 3000 feet, Mindanao, April 1, 1904. The soldiers of Vicars had recently brought in a couple of large young birds in down.

Noted on Lake Lanao, from Camp Vicars to Sowir, April 2, 1904.

" " " " at Sowir, and in the Tawaca Valley, Apr. 3, 1904.

" at Isabella, Island of Basilan, January 19, 1904.

A pair was seen about the fish-ponds at Malabon, Manila, August 6, 1905.

Several, adults and young, were kept in the Zoölogical Gardens, Manila during 1904 and 1905.

Contract Surgeon Hicks and Capt. Francis P. Spiviter, 28 Infty, saw them on Lake Lanao, Mindanao September 27, 1903; and I saw several pairs of them when crossing Lake Lanao, on the following day.

Noted on Lake Liguasan, Mindanao, May 17 to 19, 1904; on the Buluan River, connecting lakes Buluan and Liguasan, May 20, 1904; also noted at Buluan, near Lake Buluan, May 21, 1904. An adult with pure white head, tail, and belly was seen between Buluan and Lake Buluan, May 22, 1904.

Pontoaëtus leucogaster (Gmelin).

Noted at Surigao, northeastern Mindanao, April 21, 1904.

April 22, 1904. — As we commenced to ascend the Lubay River, above the town of Lubay, "one" was noted; later, "another pair"

Several seen, November 5, 1905, at Cavite, Manila Bay, Luzon.

Seen, almost daily, at Zamboanga, Mindanao, P. I., January to March, inclusive, 1906.

In February, 1906, a fine adult was brought to the zoo at Zamboanga, from the Island of Basilan.

Seen on Cabo and Fatima Islands, Igat Bay (off S. Mindanao), P. I., April 2, 1906. Some were continually flying around a bat roost on Cabo Island.

Ayala, Mindanao, P. I., April 24, 1906.

Abundant on Lake Lanao, Mindanao (altitude 2000 feet), August and Sept., 1903. One shot by Capt. Charles P. Sivister, 28th Infantry, U.S.A., on Lake Lanao.

Pinnas to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

Noted on the Rio Grande below Cotabato, Min=
=danao, March 14, 1904.

Abundant at Lake Mainit and along the whole course of the Lubay River, northern Mindanao, April 22-24, 1904.

(Sheet V.)

Pontoaetus leucogaster (Gmelin)

Noted May 4, 1904, at Tingali, on the lower Baccca River, a tributary of the Agusan, in the interior of Mindanao.

Noted at Compostela, on the upper Agusan River, in the interior of Mindanao, May 5, 1904.

One noted on the Agusan River, Mindanao, near the mouth of the Libuton River, May 6, 1904.

"A common bird on to-day's trip"; Lake Lanao to Talacogon on the Agusan River, Mindanao, May 9, 1904

Jolo, Sulu Island, January 4, 19[illegible]

On three small, wooded islands, off the southend of Dibutu Island, January 5, 19[illegible]

Captain George P. Langhorne brought aboard the U.S.A.S. "Sabah" two specimens, shot from a Moro vinta off the Island of Sitankai, January 5, 1906. The Malay crew of the Sabah used the quills for pens, etc., as I had no time for skinning such big [illegible]

One seen flying across the San Bernardino Straits off S.E. Luzon, March 27, 1907.

Two seen at Legaspi, Luzon, March 27, 1907.

One at the River, Lucena, southern Luzon, March 30, 1907.

Aparri, northern Luzon, May 24, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Sibi, southeastern Luzon, June 3, 1907.

(Sheet VI.)

Pontoaetus leucogaster (Gmelin).

Several seen at Santo Domingo de Baseo, Batan Island, May 27 and 28, 1907. Mr. Edmunds, the resident schoolteacher, informed us that several pairs nest on a low mountain ridge to the right of the town.

Several were seen on Fuga Island, P. I., May 29 and 30, 1907. Mr. William Dorr Carpenter shot at one.

Sarangani Island, off southern Mindanao, October 8, 1906.

Balut Island, Sarangani group, Jan. 23 and Oct. 8, 1906.

Mouth of river between camps No. 3 and No. 4, January 30, 1906, in northwestern Basilan.

La Mitan River, north Basilan, February 4, 1906.

Malamani Island, off Basilan Island, February 13, 1906.

Isabella, Basilan Island, February 13, 1906.

Lower Calubig River, north Samar, October 1, 1906.

Maiogan Island, off north Samar, October 2, 1906.

Two at Lanang, east Samar, October 3, 1906.

Catel and lower Catel River, east Mindanao, October 5, 1906.

Jolo, Sulu Island, October 11, 1906.

Tumindao Island, off Sitanki Island, October 13, 1906.

Some were seen on entering the harbor of Sandakan, Borneo, October 14, 1906.

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

(Sheet VII.)

Mahn-ah-cod', Filipinos of Zamboanga, fide Estrella.

Pentoactus leucogaster (Emilia).

Several seen on Corregidor Island, off Manila Bay, December 16, 1906. One perched on a tree.

Bongao Island to Tawi Tawi Island, January 6, 1906.

Manuk Manka Island, January 6, 1906.

Sibutu town, on the west coast of Sibutu Island, Jan. 7, 1906.

Jatan, Tawi Tawi Island, January 8, 1906.

Simalue Island, off Tawi Tawi Island, January 8, 1906.

Off N.E. Tawi Tawi, January 8, 1906.

Bialu, Siasi Island, January 9, 1906.

East Bolod Island, Sulu Sea, January 10, 1906.

West Bolod Island, Sulu Sea, January 10, 1906.

Jolo, Sulu Island, January 9, 1906.

Baluk Baluk Island, January 10, 1906.

Maimbun, Jolo, and Siet Pake, Sulu Island, March 1 and 2, 1906.

, [site of Lanzo's Camp 4, Jan. 30, 31, 1906], west coast of Basilan, March 3, 1906.

Margosatubig, southern Mindanao, August 16, 1906.

Cabo Island, Sgat Bay, off south Mindanao, April 3, 1906.

Hatima Island, Dumaricuilas Bay, off S. Mindanao, April 2, 1906.

San Ramon, and Ugala, western Mindanao, August 27, 1906.

Camp Connell, east coast of Samar Island, September 5, 1906.

Malampaya Sound, ~~east~~ west Palawan, September 12, 1906.

(Sheet VIII.)

Pontoactus Convergaster (Jordan).

Palawan Island (illegible) Strait, Coalamianes Isls., September 13, 1906.

Saliend Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

2 noted off Iloilo, Panay Island, January 23, 1906.

143. Haliastur intermedius Gurney.
Brahminy Kite.

Abundant at Pantar and Masaleni in Aug. & Sept., 1903.

Found on the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904.

Noted at Zamboanga, Mindanao, October 10–16, 1903.

Parang, " " 18, "

Numerous at Camp Vicars (3000 ft.), April 1, 1904.

Very common from the mouth of the Rio Grande, Mindanao, up to Lake Liguasan, October 18, 19, 1903. One was seen flying with a snake in its claws.

Noted at Davao, southern Mindanao, October 24, 1903.

Noted at Bula, on Sarangani Bay, S. Mindanao, Oct. 26, 1903.

Numerous at Glan, southern Mindanao, where, October 26, 1903, one came to the ship "Borneo", and carried away in its claws the body of a bird that I had skinned and thrown overboard. Its mate chased it and tried to take the ~~bird~~ meat away, but failed, whereupon the lucky one carried its prey to a neighboring tree on the shore and feasted. These Kites often eat their prey while swing, reaching their feet forward and bending the neck under so as to reach and tear the ~~prey~~ food.

Sam-bu-laan (Moros of Bulnan, S. Mindanao).

143. Haliastur intermedius (Gurney). [illegible]
West side of Lake Lanao, Mindanao, November 2, 1903.
This Kite follows ships and camps, acting as a scavenger.
At ~~Mindanao~~ Sugaya, on the north shore of Lake Lanao, November 3, 1903, a flock of 8 poised [illegible]

On the island of Sulu, P. I., November 12 to 26, this common Kite was seen almost [illegible]
It was noted at the beach on Landing; at Bitaka; at Panglima Hassan's residence; thence to Upa's residence; Mt. Suliman and thence to the road at Tagbi, Nov. [illegible]
Hundreds were seen along ten miles of beach between Tagbi and Jolo, November 1, 1903. A number around Jolo, Sulu, November 21–26, 1903.

Some were seen on Bungdung Island, off Sulu, November 5, 19[illegible]
" " " " Tata

Noted at Bung Bung, southern Mindanao, January 30, 1904.
Noted on the Cabasaran River, " " " " "
" at Bulnan, " " " 31, "
Residence of Datto Salis Hasin, six miles up the Cabasaran River, and two miles from the river, January 31, 1904.

On the island of Bulnan, off southern Mindanao, February 1, 1904, I shot one of the Kites that sat beside a nest, forty feet from the ground, in a tree. Several others were there.

(Sheet III.)

143. *Haliastur intermedius* Gurney.

Seen on the island of Banga (Port Banga) off southern Mindanao, February 1, 1904.

Found at Tambegan, Tambegan Bay, southern Mindanao, February 1 and 2, 1904.

Jolo, Sulu, February 4, 1904. Very abundant, almost in flocks. One of the Kites got a fish, and was pursued by ~~its mate an~~ a Sea Eagle. The Kites ~~mate~~ mate came to its assistance, but, in the scuffle that ensued the fish was dropped, and the Sea Eagle picked it up from the water.

Abundant at Siassay, island of Siassay, P. I., February 4, 1904

Noted at Lubungan, northern Mindanao, Feb. 14, 1904.

" " Camp Overton, " " Feb. 15, 1904.

Abundant (one shot) at the Subano villages of Sindangan and Uwegs, on Sindangan Bay, northern Mindanao, February 16, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Numerous along the shores of Sulu Island, P. I., on February 20, 1904, associated with the Sea Eagle.

Found on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, February 21, 1904.

Reported from the island of Siassi, P. I., by Captain J. L. Smith, 17th Infantry, U.S. Army, in 1903—'04.

143. Haliastur intermedius Jerdon.

On an overland march from Lake Buluan to Davao, Mindanao, in May and June, 1904, Captain H. R. McCoy, 3 Cavalry, U. S. A., noted this species in the Alig River Valley and on the Davao side of the mountain divide.

On March 2, 1904, I saw this species at Malabang, Pollok Naval Station, and on the lowest part of the Rio Grande, southern Mindanao.

Noted at Cottabato, Rio Grande Valley, southern Mindanao, March 3, 1904.

" " Kudarangan, " " " " 6, ".

" between " and Barak, " " " " 7, ".

Seen daily flying over the city of Manila, August 17 to 21, 1904, sometimes in small companies.

Abundant along the wagon-road from Malabang to Camp Vicars (0 to 2000 feet altitude), March 31, 1904. Young and nasty-tempered individuals were seen near Matalang Falls.

Noted from Camp Vicars, Lake Lanao, to Sonir, on Lake Lanao, April 2, 1904.

Sonir, Lake Lanao, to Rogayan (Taraca Valley), Mindanao, April 3, 1904.

April 5, 1904.- "This morning and last night, Brahminy Kites assembled in dozens, attracted by the smoke arising from burning forts." Later: "Kites in flocks attracted by the smoke of burning houses." Later: "Kites utter a whining cry from the cocoanut-tops. Dozens of them follow the troops." Abundant in the Taraca Valley, Lake Lanao Basin, April 3 to 9, 1904. Very abundant in the Taraca Valley, from Sonir to Dalanan and Huahulama and returning, April 2 to 10, 1904.

(Sheet V.)

143. Haliastur intermedius Gurney.

Brahminy Kite.

Abundant along the wagon-road from Camp Vicars to Malabang, April 11, 1905.

This Kite was frequently seen flying over Manila and the Bay, in August and September, 1904, and July to 1905. A number of them were kept, during these times, in the City Zoölogical Gardens.

Observed at Marahui, Mindanao, September 27, 1903.

Numerous at Camp Vicars (altitude about 2900 feet), September 28 and 29, 1903; also from Camp Vicars to Malabang, Sept. 29, 1903.

Noted at Buldung, Mindanao, October 1 & 2, 1903.

At Glan, southern Mindanao, October 26, 1903, these beautiful Kites came around the ship Borneo, and carried away the bodies of birds that I threw overboard as fast as I skinned them.

On Lake Liguasan, Mindanao, May 17 to 19, 1904, Brahminy Kites were numerous, and often seen to descend almost vertically to the lake in pursuit of their prey.

Noted on the Buluan River, connecting lakes Buluan and Liguasan, Mindanao, May 20 to 22, 1904. On May 22, a Kite and Oriental Purple Heron were perched in neighborly fashion upon the same tree; also noted on the Malala River and at Simpitan, May 23 to 26, 1904.

(Sheet VI.)

Haliastur intermedius Gurney.

Brahminy Kite.

Noted as common, when descending the Buluan River, Lake Buluan to Lake Leguasan, May 27, 1904.

Noted at Surigao, northeastern Mindanao, April 20 and 21, 1904.

" " Bacuag, " " " 21, ".

Noted at Dinagat, on the Island of Dinagat, April 21, 1904.

" " Davao, southern Mindanao, July, 15 to 20, 1904.

" " Zamboanga, western " , August 1, 1904.

" on the Lubay River, N. Mindanao, April 22 and 23, 1904.

Abundant at Cavite Naval Station, Manila Bay, Luzon, October and November, 1905.

The battle of Bud Dajo, on the Island of Jolo, near Jolo, lasted from March 5 to 8, 1906. About 600 Moro natives were killed, in a crater on the top of Mt. Dajo, the bodies being but slightly covered with earth. On March 26, following, an enormous flock of Brahminy Kites was visible over the peak from far out at sea.

Margosatubig, S. Mindanao, April 2, 1906

Cabo Poland, Igat Bay, off S. Mindanao, April 2, 1906.

Fatima Island. do do

Malanipa Id., off S. Mindanao, April 1, 1906.

Ayala, Mindanao, P.I., April 24, 1906.

145. Haliaeetus intermedius Lurney.
Abundant about Pantar and Lake Lanao, Mindanao, during August and September, 1903.
Zamboanga, July 24 to Aug. 1, 1904.
Seranaya Marsh to Labas, east of Cotabato, southern Mindanao, March 12 and 13, 1904.
Noted at Baguio, Benguet, Dec. 1 and 2, 1905.
Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904. Seranaya Mar[illegible]
Aboard the steamship Ranger, on the Rio Grande at the mouth of the estero which drains the Seranaya Marsh, March 14, 1904, I noted: "came to ship's side and picked up heads and viscera of chickens [illegible]
Lake Mainit, northern Mindanao, April 24, 1904.
Abundant on the Lubay River, N. Mindanao, April 22-24, 1904.
Abundant on the lower portion of the Bacoca River and on the Agusan River at Compostela, May 4-5, 1904.
Compostella to Pilar, Agusan River Mindanao, May 5, 1904.
Pilar to Jativa, Agusan River, Mindanao, May 6, 1904.
Jativa to Patrocinio, " " , " " 7, " , May
Patrocinio to Varcella, " " " " 7, " "
"Becoming more numerous," Lake Linao to Talacogon, May 9, 1904.
Butuan to the mouth of the Agusan River, Mindanao, May 11, [illegible]

Haliastur intermedius Gurney.

Jimanez, northern Mindanao, May 13, 1904.
Baliangao, on Murcialagos Bay, N. Mindanao, May 13, 1904
Dapitan, northern Mindanao, May 13, 1904.
Manila, P. I., August 17, to September 15, 1904. On the latter date I noted: "Over Manila Bay are flocks of Brahminy Kites."
Manila, July 26, 29 and 31 to Aug. 4, 1905
Several Brahminy Kites were noted from a train on the Manila and Dagupan Railroad, from Manila to Camp Gregg and returning, July 29 and 30, 1904. One was sitting in shallow water in a rice paddy eating some fish carrion.
Camp Gregg, Pangainan, Luzon, July 29 and 30, 1905
Camp Stotsenberg, Luzon, November 28, 1905.
San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.
Pozorrubio to Twin Peaks, Luzon, Nov. 30, 1905.
Common at Baguio, Benguet Province, Luzon, Dec. 1 to 12, 1905. Saw them bullying some tame geese at Baguio. One shot at Camp John Hay, Dec. 6, 1905, was very fat; and its stomach and gizzard were crammed with locust grasshoppers.
Trinidad, 4500 feet altitude in Benguet Province, Luzon Island, December 3, 1905.

(Sheet IX.)

Haliastur intermedius Gurney.

Mount Santo Tomas, Benguet Province, Luzon, Dec. 10, 1905.
Meade Road, Benguet Province, Luzon, Dec. 13, 1905
Benguet to Manila, Luzon, Dec. 13–15.
Iloilo, Island of Panay, December [illegible]
Camp Jossman, Island of Guimaras, December 24, 1905
Camp Overton, Mindanao, December 26, 1905.
Jolo, Sulu Island, January [illegible]
On three small wooded islands off the south end of Sibutu Island, January 5, [illegible]
Balanbing, on the northwest shore of Tawi-Tawi, January 6, 1906.
On the Pasig River, Manila, January 12, 1907, were a great many Brahminy Kites.
From Aparri to Laoag, Ilocos Norte, Luzon, January 14, 1907.
Laoag River Valley, below Laoag, Luzon, January 15, 1907.
Laoag to Dingras, Ilocos Norte, Luzon, " 16. "
At Paltan, Ilocos Norte Province, Luzon, January 17, 1907
one attacked a hen surrounded by her chicks and other fowls, in the plazita of a Tinguane village. The screams of hens and children, raising a terrible row, scared off the hawk.
Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.
Laoag River Valley, below Laoag, do " 19.

(Sheet X.)

Haliaeetus intermedius Gurney.

Lavag Valley below Lavag, Ilocos Norte Province, Luzon, Jan. 20–22, 1907.
Vintar Lake, Ilocos Norte Province, Luzon, January 24, 1907 and Febr. 5,
Lavag to Lavag Lake, do " " "

Following a ridge, to the right of the road from Lavag to Vintar, I came to a nest, on a tall Pseali mangi, with the parent bird sitting upon it; but I was unable to climb up the tree in order to get the eggs or young.

Abundant, Lavag to Nagpartian, Ilocos Norte, Luzon, Feb. 15, 1907.
" at Nagpartian, do Feb. 15–Mar. 9, "
" from " to Lavag, do March 9, 1907.

In July, 1907, I shot one at Haights in the oaks, where it was seen. Mr. Haight informed me that the came around his place more frequently during the time when he kept chickens, or whenever he started a large brush fire, when the smoke attracted them from the lowlands

Common to Twin Peaks, Pangasinan, Luzon, December 23, 1906.
Everywhere from Twin Peaks to Camp John Hay, Luzon, Dec. 24, 1906.
" " " " " Dagupan, Luzon, Jan. 4, 1907
Seen at 7000 feet on Mt. Santo Tomas, Benguet, Luzon, Jan. 1, 1907.
Abundant at Camp John Hay, Benguet, Dec. 24, 1906 to Jan. 4, 1907

Flying about the wharves at Legaspi, Luzon, March 28, 1907.
Mt. Mayon, Legaspi side, up to 2500 feet, Albay Province, Luzon, March 28, 1907.

(Sheet XI.)

Haliaeetus intermedius Gurney.

Tabaco, Albay Province, Luzon, March 29, 1907.

At Lucena, southern Luzon, one was chased and buffetted by two crows (Corone philippina), May

From Baguio to Camp Wallace, Luzon, ~~March~~ May 19 to 20, 1907, we found it everywhere. A crow chased one on wing as we rode up the beach near Camp Wallace.

Feeding about the grotto into which offal is dumped at Camp Wallace, La Union Province, Luzon, May 20-25, 1907.

Aparri, northern Luzon, May 29, 1907.

Cadiguran, east coast of Luzon, June 1, 1907.

Pili Hot Springs, near Tibi, Southeastern Luzon, Jan 5, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Abundant from Naujan, on the east coast of Mindoro Island to Lake Naujan, Mindoro, March 25, 1907.

Calapan, Mindoro, October 31, 1906.

Mouth of Baco River, and Subaan, Mindoro, Nov. 1, 1906.

Subaan to the Benibi River, Mindoro, Nov. 2, 1906.

Benibi River, Mindoro, Nov. 3 and 4, 1906.

Alag River, Mindoro, Nov. 5-8, 1906.

Frequent, on a ridge north of Mt. Halcon, Mindoro at 2250 feet altitude (Camp No. 3), Nov. 8-12, 1906.

Buenavista Hill, beyond the Benibi River, Camp No. 1, December 4, 1906, a flock was noted. Mindoro

(Sheet XII.)

Haliaëtur intermedius Gurney.

Sarangani Island, off southern Mindanao, P. I., January 23 and October 8, 1906

Balut Island, Sarangani group, January 23, 1906

Isabella, Basilan Island, January 26 and 27, 1906.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906

Camp No. 3, Basilan Island, January 30, 1906

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906

Cumsiarang River to Camp No. 6, interior of Basilan Island, February 1, 1906.

One of these birds was shot at, and dropped a marine fish, 12 miles from salt water ~~the ocean~~, near Tipo Tipo, Basilan Island, February 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Malamani Island, off Basilan Island, Feb. 13, 1906.

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906

Malusa, west Basilan, February 19, 1906

Camp No. 7 to Camp No. 8, interior of west Basilan, Feb. 20, 1906

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's plantation to Isabella, Basilan Id., Feb 23, 1906

Lower Catubig River, north Samar, October 1, 1906.

Abundant, October 1, 1906, on the lower Catubig River, north Samar, where Mr. Horace Fletcher brought one down so that it fell on the deck of our launch.

(Sheet XIII.)

Haliastur intermedius Jurney.

Many seen at Borongan, east Samar, Oct. 3, 1906.
Many, at Lanang, east Samar, October 3, 1906.
Bucas Island, off northeast Mindanao, October 4, 1906
Lower Cateel River, east Mindanao, October 5, 1906.
Caraga, east Mindanao, October 6, 1906.
Manay, east Mindanao, October 6, 1906.
Many were seen in the harbor of Jolo, Sulu Island, October 11, 1906, when I saw them drop and catch things in the air.
Siasi Island, October 12, 1906.
Tumindao Island, off Ditanki Island, October 13, 1906, when I was shot.
Sandakan, Borneo, October 14, 1906.
Cagayan Sulu Island, Sulu Sea, October 15, 1906.
Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.
Corregidor Island, Manila Bay, December 16, 1906.
Bongao Island to Tawi Tawi Island, January 6, 1906.
Balambing, Tawi Tawi Island, January 6, 1906.
Manuk Manka Island, January 6, 1906.
Sibutu town, west coast of Sibutu Island, January 7, 1906.
Simalue Island, off Tawi Tawi Island, January 8, 1906.
Siatu, Siasi Island, January 9, 1906.

Lauan, Tagals of Luzon. (Sheet XIV.)

Haliastur intermedius Gurney.

Jolo, Sulu Island, January 9, 1906.

Balik Balik Island, January 10, 1906.

Zamboanga, Mindanao, January 12, 1906.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Dit Lake Beach, March 1 and 2, 1906.

, [near site of Dorsey's Camp 4, Jan. 30, 31, 1906]

west coast of Basilan Island, March 3, 1906.

Parang Parang, southern Mindanao, March 14, 1906.

Lower Rio Grande, southern Mindanao, March 15, 1906.

Malabang, southern Mindanao, March 15, 1906.

Margosatubig, southern Mindanao, August 16, 1906.

common, one shot, at Sungsang, Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cebu Island, Ogat Bay, off south Mindanao, April 2, 1906.

Halina Island, Dumanquilas Bay, S. Mindanao, April 2, 1906.

San Ramon, and Ayala, western Mindanao, August 27, 1906.

Maclan Island, off the east coast of Cebu Island, September 3, 1906.

Flying in numbers about the harbor of Manila, Sept. 8, 1906, picking up food about the ~~harbor of~~ docks and shipping as fearlessly as the Japanese Kites of Nagasaki.

Numerous, September 10, 1906, on Longos Island, which, my guide informed me, is ~~the~~ inhabited by two other species of Hawks.

145. Elanus hypoleucus Gould.
White-breasted Kite.
La-quest' (Tagalos of Luzon).

One seen at Mercedes, 9 m. E. of Zamboanga, Mindanao, P. I., March 28, 1906.

Noted at Pantar and Lake Lanao, 1905.

Five were noted between ~~the mouth of the~~ Cotabato and Lake Liguasan, on the Rio Grande, Mindanao, Oct. 19, 1903.

Noted on the wagon-road between Malabang and Camp Vicars, Mindanao, November 1, 1903.

General Wood shot a specimen for the collection, and several others were seen on the island of Sulu, between Datto Ulpa's residence and his market at Bual, February 21, 1904.

Noted along the wagon-road from Malabang to Camp Vicars (0 to 3000 feet), March 31, 1904, and returning April 11, 1904.

Sept. 24, 1905, one alighted beside the street, perching on the summit of a dead bambo, in the Malate suburb of Manila. My daughter and I walked to the spot, where several natives also congregated to see it. Although ~~wan~~ were scarcely ten yards distant, and the Tagalos talked noisily, the Kite showed no fear and looked down to ~~see~~ examine us. After we had left, a boy threw a stone which frightened it away.

(Sheet II.)

143. Elanus leucurus Gould.

Observed at Paitan and Lake Lanao, Aug. & Sept., 1903.
" Lake Mainit, northern Mindanao, April 24, 1904.
Camp Hotzenburg, Luzon, November 28, 1904.
One pair at Twin Peaks, on Benguet Wagon Road, Luzon, December 14, 1906.
~~Dropped in Twin Peaks, Luzon, December [illegible]~~
One, near Twin Peaks on Cagayan, Luzon, [illegible]
Base of Mount Mayon, Tabaco side, Albay Province, Luzon, [illegible]

One was seen on the trail from Naujan to the Naujan River, eastern Mindoro, March 25, 1907; and two, one of which was shot by General Wood, were seen on the Naujan River, near Lake Naujan the [illegible]
Near Isabella, Basilan, January 26 (two) and 27 [illegible]
Mr. J. M. Browne, Deputy Governor of Basilan, showed one at La Mitan, north Basilan, February 4, 1906, a ~~large~~ young kite in captivity — a downy fledgling with ~~tail~~ quills 2½ inches long.
Camp No. 3 to Camp No. 4, Basilan Island, [illegible] 1906.
One shot, at Tourungo, Catubig River, north Samar, [illegible]
One, seen near Jolo, Sulu Island, October 11, 1906, was tamely unsuspicious.
One was shot of Loran Island (off Ubian Island) October 12, 1906. Specimen: No. 14415, ♀ad.

(Sheet III.)

Clamus hypoleucus Gould.

Specimen collected at Siatu, Diasi Island, Jan. 9, 1906.

See-Koop; [illegible]

Shiku Island, from Ofolo to Mainbiru, Bud Sajo, Crater Lake, and Viet Lake, March 1 and 2, 1906, when accompanied [illegible]

Bahin'-oog, Bagobos of Mount Apo, Mindanao.

? 144. Pernis cristatus Cuvier.

Crested Honey-Buzzard.

One was shot on Mount Apo, southern Mindanao, at the elevation of 6000 feet.

Kites, supposed to be this species were seen in the forest along the road between Malaling Falls and Camp Vicars (1000 to 3000 feet), September 29, 1903 and March 31, 1904.

One near Malaling Falls, on the Malabank-Camp Vicars wagon-road, September 29, 1903.

At Buluan, near Lake Buluan, Mindanao, May 20, 1904, I noted "a pale, long-tailed striped Hawk", which may have been this species.

At the lowest Mangyan clearing, beyond Benibi River, which we named Bueno Vista Hill, on December 4, 1906, a bird supposed to be this species flew about uttering a peculiar whistle. Estrellas shot at it several times, which frightened it away.

Between Camp No. 3 and Camp No. 4, northwestern Basilan, January 30, 1906, I saw a hawk, "larger than Haliastur, with a longer tail", which may have been this species.

Falco ernesti Sharpe.
Dusky Peregrine Falcon.

Noted at Pantar, Mindanao, in August or September, 1903.
One was seen on the Romayn River, near Lake Lanao, Mindanao (altitude 2000 feet), November 6, 1903.
On the island of Cagayan Sulu, in the Sulu ~~Sea~~ Sea, February 25, 1904, I noted: "Falcons continually soared over the highest cliffs." Again they were noted as "seen about the Moro village." One flew overhead, just as my gun had been discharged, and so was lost, Feb. 26, 1904.
Two were seen on the summit of the divide between Parang and Lake Buticj (Cararao Pass), October 4, 1903.

Falco severus (Horsfield).
Indian Hobby.

Noted at Pantar, Mindanao, in September, 1903.

While marching around Lake Lanao from Camp Vrears to Romayn River, Mindanao, during the first week of November, 1903, several were seen.

A "small black Falcon" was seen on the island of Sulu, between Hassan's and Upa's residences, November 14, 1903.

"Little dark Falcons" were noted at Bung Bung, southern Mindanao, P. I., January 30, 1904.

I saw one near the Bureau of Science, in Manila, January 9, 1907.

(Sheet II.)

Falco peregrinus Tunst

Near Tipo Tipo, interior of Basilan Island, Feb. 3, 1906.
Malamaui Island, off Basilan Island, February 13, 1906.
Seen on Mt. Apo, Mindanao, whenever we were above the forest line. June and July, 1904. Ranged to above the top

(Sheet I.)

Falco peregrinus Tunst

Peregrine Falcon.

Near Currimao, Ilocos Norte Province, Luzon, January 14, 1907, I shot an adult female, in a low tree, but it escaped wounded.

A specimen was shot on the Laoag River between Dingras and Padsan, Ilocos Norte, Luzon, January 17, 1907.

January 27, 1907, I shot an adult on the Laoag River at Laoag, Ilocos Norte Province, Luzon. It was on the sand, at the edge of an islet of the river, devouring a bird.

One tried to catch a chicken in a yard in the town of Laoag, February 5, 1907; another, same day, seen on a sand islet of the Laoag River; and, on February 7, 1907, a young male made two strikes at the hens in a yard in the central part of the city, but failed.

One on the Red River between Colgans and Tuni (Pears, Benguet Wagon Road, January 4, 1907.

Seen one at Legaspi, S.E. Luzon, March 27, 1907.

About Falcon Peak, altitude 2000 feet, Min=
=doro, November 22, 1906.

I did not see this falcon on Palmas Island until my second visit, October 7, 1906, when at least two were seen at various places from the seashore to above the highest hill.

(Sheet I.)

155. *Cerchneis tinnunculus* (Linnæus).
Kestrel.

At Mercedes, nine miles east of Zamboanga, Mindanao, P. I.

Noted on the wagon-road from Malabang to Camp Vicars, Mindanao, March 31, 1904.

Captain Hartman saw one, February 2, 1907, between Santa Matilda and Sabangui, in the extreme north of Luzon, in Ilocos Norte Province.

One on sea beach near Dairla, Ilocos Norte Province, Luzon, March 9, 1907.

I shot at one, on grassy plain at foot of Santo Tomas Peak, Benguet, Luzon, January 1, 1907. Altitude 5250 ft.

156. Pandion haliaetus (Linnaeus).

(Osprey.)

One, at Lucena, southern Luzon, dived into a fish trap and got a fish, March 30, 1907.

Noted west of Dapitan, off N. shore Mindanao, Aug. 7, 1903.

I saw several Ospreys at Zamboanga, Mindanao, Oct. 10 to 16, 1903.

Two were flying about the wharf at Parang, southern Mindanao, October 18, 1903.

Seen on Lake Lanao, 2000 feet altitude, during the first week of November, 1903.

One was noted at Sindangan, on Sindangan Bay, northern Mindanao, February 16, 1904.

Several Ospreys were fishing on Lake Lanao, at Lanao on April 9 and 10, 1904.

Captain Francis P. Sinclair, 28th Infantry, U.S. Army, shot "a large Hawk with a fish in its claws", on Lake Lanao, Mindanao, September 27, 1903. This was not the White-bellied Eagle, which he also saw.

Noted on the Rio Grande from Cottabato to the Rivermouth, March 14, 1904.

It was noted that none were seen on the Cagusan River, Mindanao, in May, 1904.

(Sheet 11.)

Pandion haliaëtus Linnaeus.

One on the Alag River, Mindoro, November 6, 1906.
Sarangani Island, off southern Mindanao, January 23, 1906.
San Antonio Bay, east Palawan, Oct. 17, 1906; one seen.
Manila Bay, December 16, 1906.
Two were noted at Mactan Island, off the east coast of Cebu Island, September 3, 1906.

[illegible] Haliaëtus [illegible] (Sheet I.)
[illegible] Fish-Eagle.

Ichthyophaga leucogaster
~~White-bellied Fish Eagle.~~

Noted on the Cabasaran River, southern Mindanao, January 30, 1904.

One was seen in captivity at Zamboanga, Mindanao, January 31, 1904.

Captain T. L. Smith, 17th Infantry, U.S. Army, in a manuscript list of the birds of the island of ~~Cag~~ Siassi, P. I., includes "Three Kinds of Eagle;" probably with reference to a species of this genus, Haliastur intermedius, and Haliaëtus leucogaster.

Noted on the lowest portion of the Rio Grande River of Mindanao, P. I., March 2, 1904.

Noted as a "large Hawk, gray below to middle of belly, then abruptly white", ~~at~~ near Isabella, Basilan, January 19, 1904.

When descending the Bulauan River, between Bulauan and Pandog, May 27, 1904, I noted the "large Hawk with front half of underparts dark and hind half white."

Compostela, on the Agusan River, interior of Mindanao, May 5, 1904; between Patrocino and Vaniella, on the Agusan River, Mindanao, May 7, 1904.

Quite numerous on the Agusan River and Lake Lanao, Mindanao, May 7, 1904.

103 (Sheet II.)

Ichthophaga ichthyaëtus (Horsfield)

I saw one on the Nanjan River, very near Lake Nanjan, Mindoro, March 25, 1907.

160. Bubo gurneyi Ingersdale.

Gurney Great Horned Owl.

Mindanao Great Horned Owl.

I saw a mounted specimen in a Manila museum, labelled: "Zamboanga, Mindanao."

Heard at Pantar, Mindanao, in August & Sept., 1903.

I saw a specimen from Zamboanga in a Manila museum.

Heard between Boldung and Lake Butig, Mindanao, October 1 to 5, 1903.

One was shot by a soldier, winter of 1905-06, at Davao, Mindanao (supposed to be this species) and given to Dr. Goodfellow, the collector. (fide Bolton.)

Heard on the upper Libungan River, east of Cotabato, southern Mindanao, March 12 and 13, 1904.

Heard on the ~~upper~~ Coatbed River, at the Mandayan village of Cotee, on the night of May 1-2, 1904; also at Calatagan on the upper Cotee, May 2-3, 1904.

At Height's-in-the-oaks, northern Benguet, Mr. Height frequently sees them in the quiet at places in the oak forest.

The Otus of Mount Apo, Mindanao, was called (Sheet I)
Otus Bung-yitt by the mountain Bagobos.

163. ~~Scops~~ Otus everetti Sharpe.
Mindanao Scops Owl.

A scops Owl of some species was seen on the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904. When hunting for a wounded Sea Eagle around the base of a cliff I flushed one; and, in a similar place, another was seen and heard the next evening. Señor Mariano de Leon, Presidente of Cagayan Sulu, said that this and the Barn Owl were common on the island.

An eared Owl of some sort was ~~sh~~ wounded by sailors of the gunboat one of on the Bolod Islands, and brought aboard ship alive.

A Scops was heard at the Manidayan village of Calee, on the ~~upper~~ Cabel River, on the night of May 1-2, 1904; also at Cabatagan on the upper Calee River, May 2 ~~and~~ 3, 1904.

A scops owl was heard on the base of Santo Tomas Peak, Benguet Province, Luzon, night of Dec. 9-10, 1905.

Spur of Mt. Halcon, Mindoro, 3300 feet altitude, Nov. 12-13, 1906 (heard at night).

An Otus was heard nightly at Camp No. 6, altitude 6300 feet, Mt. Halcon, Mindoro, Nov. 17-22, 1906.

(Sheet I.)

Otus, new species

Two owls of this genus were seen on Tumindao Island, off Sitankai Island, October 13, 1906. One was shot in the dense forest. This specimen should be the type of a new species: No. 14421, ♂ad. Stomach contained insects, only. Iris yellow. Bill and feet greenish. Both were seen in dense woods; and I noted that the ear-tufts were very prominent in life.

No. 14421, ♂ad., Tumindao Island, off Sitankai Island, October 13, 1906. I have compared this with: Otus semitorquis from Japan; type of O. boholensis; O. longicornis from Benguet; type of O. romblonis; type of O. cuyensis; type of O. calayensis. Of these the Tumindao bird is much nearer cuyensis than the others in coloration and pattern, but is darker and much smaller. It has the same white, black-tipped scapulars. The entire plumage is darker and more heavily marked. Wing about 15 millimeters shorter than in O. cuyensis. It bears no close resemblance to any of the others.

Left in the Bureau of Science, Manila: No. 14421, ♂ad.

(Sheet I.)

Otus _____

An owl of this genus was heard as we paddled by moonlight down the Naujan, Mindoro, March 25, 1907.

Benibi River, Mindoro, Nov. 3 and 4, 1906.

Heard every night on the Alag River at Camp No. 2, Nov. 5 to 8, 1906.

An Otus was repeatedly heard on Basilan Island, in January and February, 1906.

An owl of this genus was seen on Baluk Baluk Island, in the Sulu Sea off west Basilan Island, January 10, 1906.

Otus sp.

Mangyan house, altitude 3000 feet, Mt. Halcon, Mindoro, Nov. 26-28, 1906; heard at night.

One flew from a low limb over trail, near Camp No. 1 (between the Benjibi River and Subaan), Mindoro Island, December 5, 1906.

Some flew about Camp No. 3, altitude 2250 feet, Mt. Halcon, Mindoro, November 28-30, 1906, when I tried to shoot some but failed to hit them in the evening dusk.

Heard at night on Bueno Vista Hill, Mindoro, Camp No. , altitude feet, night of December 4-5, 1906.

Ctus

No. 15279, ♂ad.; Camp John Hay, Benguet Province, Luzon, July 9, 1907. Measurements: 272; 660; 194; 104; 18.5; 36; 40; cere, 10; diameter of eye, 17. Iris orange. Bill and cere, olive-horn color, with with tip of mandible yellowish. Tars greenish plumbeous, flesh color below, claws greenish plumbeous, flesh color at base. Caught by an Igorote.

Ninox japonica (Temminck and Schlegel).
Japanese Hawk-Owl.

Look-look, Jacanes of Basilan Island.
Two kinds of owls heard in Camp No. 2, Basilan Island, February 14–15, 1906.
Two kinds of Owls heard at Camp No. 1, interior of Basilan Island, February 13–14, 1906. One may have been a scops.
Mr. Marquis L. Robb gave me a skin of Ninox from ~~Basilan (near Isabella) or~~ from Zamboanga, Mindanao, P. I.
A Ninox was seen on ~~the Island~~ West Bolod Island, in the Sulu Sea between Jolo and Zamboanga, February 21, 1904.
A species of Ninox was seen on the island of Cagayan Sulu, in the Sulu Sea, Feb. 26, 1904.
One of these ~~to~~ Owls entered the quarters occupied by Dr. H. N. Kierulff, at Margosa Tubig, I. Mindanao, in March, 1906.
On Fuga Island, P. I., May 29 and 30, 1907, four were seen and two specimens collected. They should be compared with Japanese specimens. Iris yellow.
A Ninox was heard at Camp No. 5, northern Basilan, near the coast, night of Jan. 31–Feb. 1, 1906.
A Ninox was heard at Camp No. 6, in the interior of Basilan Island, night of February 1–2, 1906.
Cajoagan Island, off north Samar, October 2, 1906.

174. Strix candida Vieillot.

~~Grass-Owl.~~ Barn Owl.

A Barn Owl from the island of Sulu was kept in confinement in the city park at Jolo, where I saw it February 4, 1904. The Moros hold this bird in superstitious dread.

A female (No. 13347) was shot, at Zamboanga, Mindanao, P. I., February 17, 1904, by Captain McCoy.

On February 21, 1904, during the military activities in progress between the American soldiers and Moros of Sulu, one of these Owl's entered as a factor for peace by arousing by its cries the superstitious dread of a calamity in the breasts of the Moro combatants, One having appeared in the Moro camp near Datto Upa's place the night before.

I heard this bird on the island of Cagayan Sulu, in the Sulu Sea, February 26, 1904; and Senor Mariano de Leon, Periente of the island told me that the species is quite common there.

One shot by Capt. Geo. T. Langhorne, near Zamboanga, Mindanao, winter of 1905-06. My first specimen (No.) was preserved and presented to me by Senor Catalino Ybalio, a "Practicante" of Zamboanga, where the bird was ~~bat~~ killed.

174. Strix candida Tickell.

One was seen in the cogonal lying between the Linanaya Marsh and Labas, in the Libungan Valley east of Cotabato, southern Mindanao, March 12, 1904. Owls, supposed to be this species, but possibly species of Bubo (or) were flying about at the new residence of the municipal president, just outside, near Libungan, Mindanao, Philippines, Dec. 29, 1906. The Moros told me that these owls were noisy at night, and so they used the houseloft for their destruction.

Horace W. Byrne, Ordnance Sergeant, U. S. Army, caught one of these owls alive at Camp Overton, northern Mindanao, as he wrote me under date of July 3, 1907.

Epiphyrsous ionostrial Habit.

[illegible]

Leese-leese (Bagobo).

Not seen above 7000 feet on Mount Apo.
Some were noted as low as 4000 feet.
Leese-leese (equal accent), Bagobos of Mount Apo.

(Sheet 1.)

249. *Cacatua sanctissima* (P. L. S. Müller).
Philippine Cockatoo.

Noted at Pantar, Maradui & Lake Lanao, in [illegible]

This Cockatoo was abundant on the Rio Grande, Mindanao, October 19, 1903. Its flight is with rapid wing-strokes, not raising the wings high above the back but striking very low with them. They were sometimes in flocks, but often flying singly, or in pairs.

Noted at Davao, Mindanao, October 24, 1903.

Flocks of 15 and 3 Cockatoos flew around the transport "Borneo," at Illan, southern Mindanao, October 26, 1903.

When landing troops on the beach at Siet-Lake, on the Island of Sulu, P. I., November 12, 1903, these Cockatoos were so abundant as to infest the trees along the shore. One was shot at Siet Lake, Nov. 12, by [illegible]. Cockatoos were seen daily until we left Sulu, November 26, 1903. On the 11th, General Wood shot four for the cook [illegible], at Kanas [illegible]; and we shot seven more, together with Green Parrots, as a ~~needed~~ necessary supplement to our meager mess supplies. Cockatoos are deliciously flavored but rather tough, while Tanygnathus's meat was tender and delicious.

249. Cacatua haematuropygia (P. L. S. Müller).

Many seen between Upas cotta and Cerater Hills, Nov. 15, 1903.

In the vicinity of Cerater Mountains, November 15 to 18, flocks of from 100 to 200 Cockatoos were seen, towards evening, feeding in corn and tapioca fields of the Moros; but flocks of 5 to 10 were more usual. They appear to be noisily quarrelsome, scolding continually in flight. Seen on Mt. Bulinman and thence to the beach at Taglibi, November 19–21, 1903. Many seen along ten miles of beach between Taglibi and Jolo, Nov. 21, 1903. Swarmed in the tapioca fields of the boros behind Jolo, November 21–26, 1903, when many were shot for food. Noted at Pantar and Tila Islands in second of February, 1903.

Many Cockatoos were seen at Bung Bung, southern Mindanao, P. I., January 30, 1904.

At the residence of Datto Salis Hasin, two miles from the Cabasaran River, southern Mindanao, Jan. 31, 1904, large flocks of Cockatoos were feeding in the fields of corn and tapioca. Other flocks were roosting at evening on trees along the river, or on clumps of sapling sur=
=rounded by water.

Flocks of Cockatoos were noted in trees along the shore at Lubungan, northern Mindanao, Feb. 14, 1904.

One flock of 9 Cockatoos seen at Iligan, northern Mindanao, P. I., February 15, 1904.

Noted at ~~Iligan~~ Camp Overton, northern Mindanao, February 15, 1904.

Philippine Cockatoo.

249. Cacatua haemoturopygia (P. L. S. Müller).

Abundant near the mouths of two rivers entering Sarangani Bay at the Subano village of Mucas, in northern Mindanao. ~~Crows~~ Annoying Crows elicited the harshest ~~cries~~ screams of these ever petulant birds, on trees so high that five loads of No. 4 shot were required to bring two Cockatoos to the ground.

Many seen, one shot, on the island of Sulu, P. I., between Datto Mpa's residence and his market at Bual, December 21, 1904.

Note.—I saw no Cockatoos on the island of Cagayan Sulu, in the Sulu Sea, during my stay there of two days.

Listed from the island of Siassi, P. I., in 1903–'04, by Captain T. L. Smith, 17th Infantry, U. S. Army.

On a march overland from Lake Buluan to Davao, southern Mindanao, in May and June, 1904, Captain H. R. McCoy, U. S. Army, noted these birds in the Alip River Valley and on the Davao side of the mountain divide.

In the aviary of Captain Coffin, U. S. Navy, at the Pollok Naval Station, southern Mindanao, I saw one that Moros had brought in from that vicinity.

Abundant at Cottabato, southern Mindanao, March 3–5, 1904.

249. Cacatua haematuropygia (P. L. S. Müller).

Noted on the Rio Grande at Kudarangan, Mindanao, March 6, 1904.

Many seen between Kudarangan and Barak, Rio Grande Valley, Mindanao, March 7, 1904.

I saw none in the Taraca Valley, Lake Lanao Basin, April 2 to 10, 1904.

Two were noted a short distance north of Buldung, southern Mindanao, October 2, 1903; others were seen at Buldung, October 1, 1903.

Noted at Glan, southern Mindanao, October 26, 1903.

Noted at Simpitan, near Lake Buluan, Mindanao, May 24 and 25, 1904.

Seen at various places along the Rio Grande between Lake Liguasan and the rivermouth, May 28 and 29, 1904.

Common at Davao, southern Mindanao, July 15 to 20, 1904.

"Flock of three" noted on the Tubay River, northern Mindanao, April 22, 1904.

Flocks were seen on the River, S. Mindanao, Apr. 2, 1906

At Pollok Naval Station, southern Mindanao, March 2, 1904.

I saw this ~~species~~ cockatoo in the aviary of Commander Frederick W. Coffin, U.S. Navy — a handsome bird, brought in by Moros from that vicinity.

Numerous on the Lebungan River, ~~east~~ in the vicinity of Labas, southern Mindanao, March 12 and 13, 1904.

Drains to Barak, Rio Grande Valley, March 7–11, 1904

Flocks seen around Datto Ali's Dorandaya fort, March 11–13, 1904.

(Sheet V.)

Cacatua haematuropygia (P. L. S. Müller).

Noted on Lake Minit, N. Mindanao, April 24, 1904.

On the Tubay River, northern Mindanao, April 22-24, 1904, this Cockatoo was abundant, especially about Santiago, where scores of them roosted in a grove of cocoanut trees on the edge of the village.

Flocks noted from Baganga to Christian Ado's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Noted May 4, 1904, at Singali, on the lower Bacoca River, in the interior of Mindanao. On May 5 in a Manobo clearing, between Singali and Compostela, Mr. Eberhart shot into a flock of 100 cockatoos and killed 2 of them.

Flocks on the Agusan River, from Pilar to Nativa, Mindanao, May 6, 1904. Some were shot for food, as flocks passed our boats; and I shot 3 more in camp at Nativa.

Nativa to Patrocino, Agusan River, Mindanao, May 7, 1904.

Varicella, on the " " " " 7, " .

Flocks on Lake Linao, Agusan Valley, Mindanao, May 8 and 9, 1904.

Flocks from Lake Linao to Talacogon, on the Agusan River, May 9, 1904.

Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11, 1904.

Agusan River below Butuan, Mindanao, May 11, 1904.

Flock of 30 at Lapitan, N. Mindanao, May 13, 1904. They are noisy, scolding, gregarious birds; and, if not the most abundant Parrot in Mindanao and Sulu, it is certainly the most conspicuous.

(Sheet VI.)

Cacatua haematuropygia (P.L.S. Müller).

Camp Stotsenberg, Luzon, November 28, 1905.

Mouth of Baco River, Mindoro, Nov. [illegible] 1906.

Specimen (No. 14560 ♂ ad.) shot at Subaan, eastern Mindoro, December [illegible], 1906.

Davao, Mindanao, January 22, 1906.

Sarangani Island, off southern Mindanao, January 23, 1906.

Isabella, Basilan Island, January 26 and 27, 1906; come to some trees in the town at evening to roost.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.

Common from Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906. Specimen collected: No. [illegible]

Camp No. 3, Basilan Island, January 30, 1906.

Tipu Tipu, interior of Basilan Island, February 15, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906.

Buli Buli River to Camp No. 5, south Basilan Is., February 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

near Malusa, west Mindoro, February 19, 1906.

Camp No. 7 to Camp No. 8, interior of west Basilan, Feb. 20, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Abundant at Mr. Henry Musser's plantation, near Isabella, north Basilan, February 22, 1906.

Numerous on the lower Catubig River, north Samar, Oct. 1, 1906, when Captain James K. Thompson wounded one (No. 14[illegible]) at [illegible] that but [illegible] severely.

(Sheet VII.)

Cacatua haematuropygia (P.L.S. Müller).

Lanang, east Samar, October 3, 1906.

Seen everywhere, on the lower Cateel River, east Mindanao, October 5, 1906, when 12 were shot by the party for food. They were in flocks of 3 to 20 together.

Caraga, east Mindanao, October 6, 1906.

Manay, east Mindanao, October 6, 1906.

Abundant, on Sulu Island, from Jolo to Bud Dajo Peak, October 11, 1906.

I shot one of several found feeding in corn and tapioca fields, on Loran Island (off Ubian Island), October 12, 1906.

Jumindao Island, off Sitankai Island, October 13, 1906.

Left in the Bureau of Science: Nos. 14336 and 14560, ♂ ♀.

From a flock of wild cockatoos, flying over the treetops of Manuk Manka Island, January 6, 1906, I brought down one individual, which, on skinning, was discovered to have a piece of copper wire twisted around its tarsus, showing that it had once been in captivity.

Tatán, Tawi Tawi Island, January 8, 1906.

Abundant on Sulu Island, from Jolo to Mainbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Cotabato, Southern Mindanao, March 15, 1906.

(Sheet VIII.)

Cacatua haematurophygia (P. L. S.) Müller.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Lieutenant Charles M. Maigne, 7th Cavalry, U.S. Army, found it at Camp Gregg, Pangasinan Province, Luzon, in August, 1905.

Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.

Tagulaya up to 1030 feet on Mt. Apo trail, Mindanao, June 15, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

Cacatua

Kah-tah'-lah (Filipinos of the Philippine Islands).

No. 15278. ♀ ad. Camp John Hay, Benguet Province, Luzon, July 5, 1907. Measurements: 540; 1085; 346; 207; culmen and cere —?; culmen exclusive of cere, 40; tarsus, 26; middle toe with its claw, 58; cere, 5; depth of bill, 42; longest occipital plume, 138. Iris hazel. Naked skin around eye, pure white. Bill and cere all dark plumbeous. Feet and claws dusky plumbeous.

From December 24, 1906, to January 4, 1907, General Wood saw a large white cockatoo in the pine woods at Camp John Hay, on several occasions; on 190, I saw one in a pine tree near Mr. Kelley's Igorote school; and on July 5, 1907, my assistant Seenaco shot the above-described specimen from the top of a pine tree at Camp John Hay. The bird was shown to Mr. [illegible], who said he had often seen 2 or 3 of these large white cockatoos together at Camp John Hay. A miner also told me that large white parrots were often seen in Benguet. The fact that no marks of captivity could be found upon the specimen shot, and that two persons claimed to have seen more than one of these birds at one are against its having been an escaped caged bird.

(Sheet I.)

Prioniturus discurus (Vieillot)

Blue and Racquet-tailed Parrot

Whe-whe-gue-pea'-ah (Filipinos of Santa Maria, Mindanao).

A flock was seen, between Pantar and Camp Overton, northern Mindanao, ~~February~~ November 8, 1903.

One was shot, at Zamboanga, Mindanao, P.I., by Master Powell, in 1904.

Captain Langhorne, U.S. Army, (No. 13338 Jad.) February 16, 1904, shot one for the collection on one of two rivers that enter Sarangani Bay, northern Mindanao, at the Subano village of Mucas.

Small flocks of these birds were annoyed by pestering crows, at Santa Maria, northern Mindanao February 17, 1904.

Seen at Kudarangan, on the Rio Grande, Mindanao, March 6, 1905.

Seen on the road between Pantar and [illegible]

[illegible] wounded at Pantar

Kal'-let (Moros of Zamboanga).

Noted between Mialabong and Camp Vicars, Mindanao, March 31, 19[illegible]

One seen near Matalung Falls, Mindanao, September 27, 1903.

Noted between Bulgung and Cararao Pass, Mindanao, October 2 to 4, 1903.

Señor Estrellos says it is quite common in the hills about Zamboanga, Mindanao, P.I.

Ayala, Mindanao, April 24, 1906.

Libungan River, east of Cotabato, northern Mind., March 12 & 13, 1904.

Prioniturus discurus (Vieillot).

Uncommon on Lake Mainit and its outlet, the Tubay River, northern Mindanao, April 22-24, 1904.

Baganga to Christian Ade's hemp plantation 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Noted on the upper Cabel River, at the Mandayan village of Calce, May 2, 1904.

Bacoca River, a tributary of the Agusan, arising on the west slope of the East Coast Range of Mindanao, May 4, 1904; also at Tingali, on the lower Bacoca.

Many flocks crossed the Agusan River, between Pilar and Jativa, Mindanao, May 6, 1904; Abundant at Jativa, May 6 and 7, 1904.

Jativa to Patrocino, Agusan River, Mindanao, May 7, 1904.

Between Patrocino and Varicella, on the Agusan River, I saw several pairs occupying several holes in a large tree near the river bank, May 7, 1904.

Varicella, on the Agusan River, Mindanao, May 7 & 8, 1904.

On Balut Island, Darangani group, off southern Mindanao, on January 23, 1906, I saw many racket-tailed parrots, apparently of this species. They were most numerous in a notch at the summit of the main mountain range, at about 2000 feet altitude.

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(Sheet III.)

Kell-lit, Moros of Basilan.

Prionitrus discurus (Vieillot)

Near Isabella, Basilan Island, January 26, 1906

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906

Tipo Tipo to Camp No. 8, interior of Basilan Id., Feb 3, 1906

Called Kell-lit by the Moros of Basilan.

General Wood shot one, at Lanang, east Samar, October 3, 1906, but lost it on the way back to the ship.

Abundant, in small flocks on the lower Coteel River, east Mindanao, October 5, 1906, when 6 were shot and 5 specimens preserved (Nos. 14371-5).

Prionitrus discurus suluensis W. Blasius was noted on Sulu Island, from Jolo to Bud Dajo Peak, October 11, 1906; but Mr. Worcester says[1]: "A careful com=

[1] Footnote to page 490 of Hand-List of the Birds of the Philippine Islands, by Richard C. McGregor and Dean C. Worcester, 1896.

= parison of specimens obtained by Bourns and ~~Worcester~~ myself in Sulu failed to disclose any difference between them and typical P. discurus, and I am of the opinion that Blasius's "variety" can not stand.—Worcester."

Collected at Camp Keithley, on Lake Lanao, Mindanao, by Chaplain (Captain) Joseph Clemens, U. S. Army.

A number seen on Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

(Sheet I.)

Prioniturus waterstradti Rothschild.

Too'-sing, Bagobos of Todaya, Mount Apo, Mindanao.

Flocks of birds that look, at a distance, like Parrots frequently fly high over Camp Goodfellow, on Mt. Apo, Mindanao, during the last half of June, 1904. The Bagobo natives called them Too'-sing.

July, 3, 1904. — Many Racket-tailed Parrots are flying in chattering flocks.

July 10, 1904. - Noted at 5 275 feet on Mt. Apo.

(Sheet I.)

Prioniturus mindorensis Steere

Two at Camp No. 2, Alag River, Mindoro, Nov. 6 and 7, 1906.

Flocks were frequent, screaming loudly, at Camp No. 3, on a ridge north of Mt. Halcon, Mindoro at 2250 feet altitude, Nov. 8-12, 1906.

Nov. 12 and 13 and 26 to 28, 1906, several small flocks were seen in the Mangyan ~~clearing~~ clearing or "caingin", extending from 3000 to 3300 feet altitude on a spur of Mount Halcon, Mindoro.

From November 13 to 17, 1906, at Camp No. 5, on a spur of Mount Halcon, Mindoro, at 4500 feet altitude, flocks frequently flew up or down the ridge, and one individual was shot.

In descending Mount Halcon, Mindoro, at Camp No. 3, altitude 2250 feet, November 28 to 30, 1906, many flocks, the largest of 14 individuals, flew with loud crying about the hill on which our tent was pitched in a Mangyan clearing. Specimen (No. 14510) shot had filled its crop with seeds of Elaeocarpus. (Elaeocarpus mindanensis).

It was common ~~from~~ between Camps 4 and 3, altitude 3300 to 2250 feet, Nov. 28, 1906.

Specimens shot, in Mindoro, at Camp No. 5, altitude 4500 feet, November 16, 1906; Camp No. 4, altitude 3300 feet;

(Sheet II.)

Prioniturus mindorensis Steere

; Camp No. 3, altitude 2250 feet; Camp No. , alti=
=tude about 400 feet, at Junction of and Alag
rivers (1st crossing); lower Dubaan River; Dubaan ¾.

(Sheet I.)

Prioniturus montanus Grant.

O'-lis or Oo'-lis (Igorotes of Benguet).

Some of this genus, seen in the oak woods near the summit of Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905, were apparently this species.

This parrot, which is quite numerous at Haights-in-the-oaks, Benguet Province, Luzon, utters a squeaky sound like that of a rusty wheelbarrow. Its cry of oo'-lis is a soft love note which is its Igorot name. It has a variety of harsh notes, the loudest being those of alarm when it takes sudden flight. Its ordinary flight notes are much softer utterances.

The red-crowned, racket-tailed Parakeet is abundant at Haight's. Its actions reminded me much of those of our Carolina Parroquet. It flies about in pairs, or flocks up to a dozen, in the same noisy, erratic manner, often rising to a great height in the air. In July I found it feeding almost exclusively on acorns, which it splits in two pieces before swallowing. When feeding it will permit one to walk beneath, even when the trees are no more than 30 feet in height. A pair bred in a tall oak stub behind Mr. Haight's house. Mr. Haight thinks it was during August or September — near the end of the rainy season. Its screams are similar to those of

(Sheet II.)

(Psittacus monilatus Grant.

The Carolina Parakeet. The nest was 15 to 20 feet above the ground. Only the old males have red crowns.

Left in the Bureau of Science: No. 14351, Benguet Province

(Sheet III.)

Pithecophaga jefferyi Grant.

K'lau-tee'-pahk, Bagobos of Todaya on mount Apo.

Under date of August 30, 1905, Mr. Fletcher L. Keller, of Santa Cruz, on the west shore of Davao Gulf, Southern Mindanao, wrote the following:

"In regard to the Monkey-eating Forest-Eagle, I have been told that there is a nest about 15 miles from Santa Cruz. It is in the mountains; and I have a native who is going to let me know when there are young ones there. Then I will try to capture them; and I wish you could be with me."

I have filed with W.S., 2 photographic prints, different views, of an individual taken east of Lake Lanao, Mindanao, early in the year 1906, photographed by Dr. James Wallace Van Duzen, United States Army.

The big bird that flies over the treetops with a loud whurring sound is a great eagle called K'lau-tee'-pahk by the Bagobos from Todaya.

(Sheet I.)

Prioniturus verticalis Sharpe

A racket-tailed parrot, probably this species was seen on Turmindao Island (off Ditanki Id.), Oct. 13, 1906.

A number seen on Manuk Manka Island, off Tawi Tawi Island, January 6, 1906, when a specimen was taken. Common at Dibutu town, west coast of Dibutu Island, January 7, 1906, when a specimen was collected.

255. Tanygnathus lucionensis (Linnæus).

?Lahng'-gahm, Bagobos of Todaya, Mount Apo, Mindanao.

This Parrot has been recorded from Cagayan Sulu, Mindanao, Basilan, and Sulu islands.

Noted at Davao, southern Mindanao.

A few small flocks were seen at Siet Lake, on the island of Sulu, November 12, 1903; and their voices were continually heard during the day. They flew about more actively during the morning. Its peculiarity of flight and a more lizzard cry when flying always reminded me of a Dove. One was shot by General Wood, near Hassan's residence, November 13, 1903 (No. 13124 ♂ ad). The species was abundant at Upa's place. Many were seen on the trail from Upa's cotta to Crater Mountain, November 15, 1903; small flocks seen daily in the vicinity of Crater Mountain, November 15–18, 1903. Its flight and notes are like a Duck's. Mt. Sulieman and thence to the beach at Taglibi, Nov. 19–21, 1903. I saw many of them in trees along the beach, from Taglibi to Jolo, Nov. 2[illegible]. Common around Jolo, November 21–26, 1903.

One shot on Pangapinyan Island off Mindanao about 12 miles east of Zamboanga, February 20, 1904.

Blue-crowned Parakeet.

(Sheet II.)

255. Tanygnathus lucionensis (Linnaeus).

One seen at the place of Datto Pala's Hasin, six miles inland and two miles from the Cabasaran River, January 31, 1904.

Found at Tambigan, Tambigan Bay, southern Mindanao, February 1 and 2, 1904.

One seen in a tree within the walled city of Jolo, Sulu Island, P. I., February 4, 1904.

Many Parrots of this genus were seen, and four specimens from one flock collected, on the island of Sulu, P. I., between Datto Upa's residence and his market at Bual, February 21, 1904.

A Tanygnathus was noted on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, Feb. 21, 1904.

On the island of Cagayan Sulu, in the Sulu Sea, February 25, 1904 large Parrots like No. 13369 were occa=
=sionally flushed in the forest. During the afternoon I shot one of a pair from a cotton tree beside a Moro house; and, towards morning, their voices were heard everywhere, as they flew about singly or in small flocks. They were numerous in tal tree or the border of a mangrove swamp. Capt. Langhorne also saw them in twice crossing the island on February 25, 1904.

Blue-crowned Parrakeet. 114 (Sheet III.)

255. Tanygnathus luconensis (Linnaeus).

(2) Tanygnathus was found on the island of Siassi, P. I., in 1903-4, by Captain T. L. Smith, 17th Infantry, U.S. Army.

On an overland march from Lake Buluan to Davao, Mindanao, Captain H. R. McCoy noted these Parrots in the Alip River Valley and also on the Davao side of the mountain divide, in May and June, 1904.

Captain Coffin, U. S. Navy, had one in his aviary that was caught at the Pollok Naval Station, Mindanao.

Noted at Cottabato, Rio Grande Valley, Mindanao, March 3, 1904.

" " Kudarangan, " " " " 6, " .

None were seen in the Taraca Valley, April 3 to 9, 1904.

Noted at Isabella, Island of Basilan, January 19, 1904.

Noted near Marahui (at 2300 feet altitude), Sept. 27, 1903.

Noted in small numbers between Camp Vicars and Matalnig Falls, Mindanao, September 29, 1903.

Noted between Parang and Buldung, at Buldung, and from Buldung to the grave of the Datto who attacked Lieutenant Forsyth's command (Troop "A" 15th Cavalry), March 15, 1902, September 30 to October 2, 1903.

Noted at Simpitan, near Lake Buluan, Mindanao, May 24 and 25, 1904.

Seen in captivity at Surigao, N.E. Mindanao, April 21, 1904.

Tanygnathus luconensis (Linnaeus).
Blue-crowned Parrakeet.

On Malanipa Island, off S.W. Mindanao, April 1, 1906, this species was abundant. A pair was seen feeding their young in the cavity of a tall, leaning tree, about 100 feet above the ground. The opening was of irregular shape and quite large. The birds sometimes sem hanging from it by their beaks. Three were shot on this island. One preserved.

A common pet, usually kept tied by leg. In spite of its petulant protests it really likes attention and petting.

Ayala, Mindanao, P. I., April 24, 1906.

Specimens collected at Camp Keithley, on Lake Lanao, by Joseph Clemens, Chaplain, U.S. Army, were similar to those I obtained at Davao.

I saw this species in the aviary of Commander Frederick W. Coffin, U.S. Navy, at Pollok Naval Station, southern Mindanao, March 2, 1904, brought in by Moros from that vicinity.

Abundant in the Libungan Valley, in the vicinity of Labas, southern Mindanao, March 12 & 13, 1904.

Prairies to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

"Several" noted on the Sulay River, northern Mindanao, April 22-24, 1904.

Noted from Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Tanygnathus lucionensis (Linnaeus).

(Ide's plantation to the River, eastern Mindanao, April 27, 1904.

Agusan River, from Pilar to Jativa, Mindanao, May 6, 1904.

Jativa to Patrocino, Agusan River, Mindanao, May 7, 1904.

Varicella, on the Agusan River, Mindanao, May 7 and 8, 1904.

Lake Linao, middle Agusan Valley, Mindanao, May 8 and 9, 1904.

Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904; species "not very abundant in this valley.

Agusan River below Butuan, Mindanao, May 11, 1904.

A form of this genus (possibly T. everetti) having some blue on the rump was abundant from Nayan (on the coast) to Lake Naujan, eastern Mindoro, March 25, 1907.

The same form was noted at Calapan, Mindoro, Oct. 31, 1906, and at the mouth of the Baco River, Mindoro, Nov. 1, 1906.

Lower Subaan River, Mindoro, Nov. 2, 1906.

Specimens were taken, in Mindoro, at: lower Subaan River, Dec. 5; Subaan, Dec. 6.

Kong-ogg, Moros of Basilan Island.

Pee-lee-eo, Filipinos of Basilan Island.

Davao, Mindanao, January 22, 1906.

Sarangani Island, off southern Mindanao, January 23, 1906.

Common on Balut Island, of the Sarangani group, off southern Mindanao, Jan. 23 and Oct. 8, 1906.

(Sheet VI.)

Ah-gop, Moros of Basilan Island.

Tanygnathus lucionensis (Linnæus).

Isabella, Basilan Island, January 26 and 27, 190[illegible]

Camp No. 1 (Isabella) to Camp No. 2, Basilan Island, January 28, 190[illegible]

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 190[illegible]

At Camp No. 3, Basilan Island, January 30, 190[illegible]

Camp No. 4 to Camp No. 5, northwest Basilan, January [illegible]

Tipo Tipo to Camp No. 8, interior of Basilan Id., Feb. 3, 190[illegible]

Camp No. 8 to La Mitan, north Basilan, February 4, 190[illegible]

Called Ah-gop by the Moros of Basilan Island

Tipu Tipu, interior of Basilan Id., Feb. 15, 1906; No. 13953.

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906

Buli Buli River to Camp No. 5, south Basilan, February 17, 1906

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906

Malusa, west Basilan, February 19, 1906.

Camp No. 8 to Camp No. 9 (Musser's plantation), North Basilan, February 21, 1906.

Abundant at Mr. Henry Musser's plantation, near Isabella, north Basilan, February 22, 190[illegible].

One was shot at Burengo, Catubig River, north Samar, October 1, 1906.

At Lubig (now known as Taft), eastern Samar, flocks were noted on October 3, 1906.

Lanang, east Samar, October 5, 1906.

A good many were seen on the lower Cateel River, east Mindanao, Oct. 15, 1906. The only one shot was very small, apparently young of the small form which I obtained at Tagulaya and Davao, Mindanao.

Tanygnathus lucionensis (Linnaeus).
Caraga, east Mindanao, October 6, 1906.
Manay, east Mindanao, October 6, 1906.
Sulu Island, from Jolo to summit of Bud Dajo Peak, October 11, 1906.
I shot one of a pair, on Loran Island (off Ubian Island), October 12, 1906. Specimen: No. 14417, ♂ ad.
Common on Tumindao Island, off Sitanki Island, October 13, 1906. I skinned one of two that Estrellas killed (No. 14424, ♀ ad. Moulting).
Cagayan Sulu Island, Sulu Sea, October 15, 1906.
Tagbanoa village, 5 miles inland from Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.
Specimens collected by Chaplain Clemens at Camp Keithley, on Lake Lanao, were like those I got at Davao, Mindanao, and had no blue on the rump.
Mamuk Manka Island, January 6, 1906.
This species and Tanygnathus burbidgei were common, and feeding in the same trees together, at Sibutu town, west coast of Sibutu Island, January 7, 1906, when ~~specimens of~~ both species were collected.
Abundant on Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.
Parang Parang, southern Mindanao, March 14, 1906.

Kahr-rang'-ogg, Bagobos of Tagulaya on the Gulf of Davao. (Sheet VIII.)

Tanygnathus luciionensis (Linnaeus).

Captains James P. Jervey and George T. Langhorne, U.S. Army, shot some of these parrots 9 m. E. of Zamboanga, southwestern Mindanao, March 16, 1906. I skinned one for Captain Langhorne.

Three were shot on Malanipa Island, in the Celebes Sea off south Mindanao, April 1, 1906.

Halima Island, Bernanguilas Bay, off S. E. Mindanao, April 2, 1906.

Sulug, east shore of Davao Gulf, southern Mindanao; June 12, 1904.

Tagulaya, west shore of Davao Gulf, southern Mindanao; June 14, 1904.

Abundant, but molting at Davao, southern Mindanao, July 18 to 20, 1904.

At a crossing of the See-ree'-bahn River, between Camp Goodfellow and Todaya, where the aneroid indicated an altitude of 5275 feet, I saw a parrot that ~~looked like~~ appeared to be this species and was called Lahng'-gahm by the mountain Bagobos of Todaya; but the Bagobos of Tagulaya, on Davao Gulf, use the name Kahr-rang'-ogg for this parrot.

Dulag, east coast of Leyte, July 25, 1906.

256. *Tanygnathus lucidus* Mayr.
Blue-rumped Parrakeet.

Sibutu, west coast of Sibutu Island, January 7, 1906.
I shot one on Loran Island (off Albian Island), October 12, 1906; but it escaped, wounded, by climbing into a thicket.
I have only obtained this species on the island of Sulu.
The voice of this Parrot is so different from that of *Tanygnathus lucionensis* as to be readily distinguished. Some were heard at Siet Falls on the island of [illegible]; one shot in the foothills behind Jolo [illegible]; heard and seen daily in the vicinity of Crater [illegible]; Mt. Suleiman and thence to the beach at [illegible]. I saw many of them while riding from [illegible] along the beach, November 21, [illegible]. At Jolo two specimens of *Tanygnathus* were [illegible], November 21–26, 1903. A blue-rumped one was shot, at Jolo, November 25 (No. 13140, ♀ ad.). Its voice is quite different from that of No. 13132 ♀ ad., shot at Basilan [illegible], November 17, 1903, and [illegible].

Common on Sulu Island, from Jolo to summit of Bud Dajo Peak, where I shot No. 14400, ♀ ad., Oct. 11, 1906.

116 (Sheet 11.)

Syngnathus burbidgei Sharpe.

Common on Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Bolbobsittacus [illegible]

Mindanao Collection [illegible]

Dec'- Kg Kal'- [illegible]

Some specimens of Bolbobsittacus collected at Paralan, Mindanao, had the crown blue-ringed, others yellow-ringed [young]. Those collected at Surigao and Davao, Mindanao, were blue-ringed [adult].

Noted at Zamboanga, Mindanao, October 10 [illegible]

Noted at Baganga, eastern Mindanao, P. I., [illegible]

Many of these beautiful ~~birds~~ (Parrots) were feeding about a large, partly dead tree, near the beach. Individuals often tired of flight, and rested on small dead twigs, uttering a whizzy note.

Noted at Davao, southern Mindanao, [illegible]

North side of Lake Lanao, [illegible]

Noted at Kudarangan, on the Rio Grande, Mindanao, [illegible]

Noted along the wagon road from Malabang to Camp Keithley (Cotabato field), [illegible]

Noted at Malabang, southern Mindanao, [illegible]

Noted between Buldung and Cararao Pass, Mindanao, Oct. 2 and 3, 1903.

Quite common at Buluan, near Lake Buluan, Mindanao, May 21 to 23, 1903. It commonly frequented the coconut trees, in company with Loriculus [illegible].

Bolbobsittacus mindanensis (Steere).

Mindanao Collared Parrakeet.

Noted on the Malala and Numbawata rivers, on the trail from Buluan to Sempitan, Mindanao, May 24, 1904; also at Sempitan, May 24 and 25. Some were also noted when descending the Buluan River, between Buluan and Pandog, May 27, 1904.

Abundant in the hills surrounding Zamboanga. Bills of 2 ~~old~~ males collected April , 1906, were a mixture of gray and horn color.

Abundant at Lanao and Lake Lanao, Aug. & Sept. 1903.

Upper Libungan River, east of Cottabato, Mindanao, March 12-13, 1904.

A few were seen on Lake Mainit and along the Tubay River, northern Mindanao, April 22-24, 1904.

Baganga to Christian Cedo's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 7-8, 1911.

Cedo's plantation to the River, eastern Mindanao, April 9-11, 1911.

Noted on the upper Cotcot River, eastern Mindanao, at the Manobugan village of Cotcot, May 2, 1911, and upper Cotcot River at its source in the Coast Range Mountains of eastern Mindanao, May 3, 1911.

Bucoco River, a tributary of the Agusan River, eastern Mindanao, [illegible]; also on the Lower Bucoco River, May [illegible]

(Sheet III.)

Bolbopsittacus mindanensis (Shere).

Salvia to Patrocino, Agusan River, Mindanao, May [illegible]

Varicella, on the Agusan River, Mindanao, May 7 and 8, [illegible]

Lake Linao, middle Agusan Valley, Mindanao, May [illegible]

"Calang" wind, from Lake Linao to Talacogon, on the Agusan River, Mindanao, May 9, 1904.

Talacogon to Butuan, Agusan Valley, Mindanao, May [illegible]

Agusan River below Butuan, Mindanao, May [illegible]

On the lower Cabed River, east Mindanao, October 5, 1906, I found it more numerous than I had ever seen it before; three shot, two specimens (Nos. 14368 and 14369) saved.

Not uncommon, and in good plumage, at Davao, southern Mindanao, July 18 to 20, 1904.

Camp Overton, northern Mindanao, July 9, 1906.

Bolbopsittacus

Kal-oh-see'-see or Thom'-ah-see'-see, Bagobos of Mount Apo.

261. Loriculus apicalis Bonaparte.

Lindayan 'ave-bird or 'lorikeet.

Kro-oh-see'-see (Moros of Zamboanga).

At the Kiangan settlas, near Lake Lanao, April 9, 1904, [illegible] Lorquets flew over our camp with loud squeals (like [illegible] plic-ed [illegible]). Some alighted on a bolol-nut palm close on the banks of the settlas.

Noted on Lake Lanao (N. side) [illegible]

Noted at Baganga, eastern Mindanao, P. I. [illegible]

At Buhuan, on the mainland of southern Mindanao, January 31, 1904, I saw a flock feeding among the large flowers of a leguminous tree similar to the locust.

Seven were shot in cocoanut trees at Dipulog, northern Mindanao, P. I., February 14, 1904. Bill red. Feet yellow, with black claws. Large, loosely-roving bands inhabited the cocoanut groves, but were not seen elsewhere. When a shot was fired, they would rise and scream loudly as they circled overhead, but would soon return. They were quite gentle, and some continually returned to ~~one~~ a bird that had ~~been shot and that had~~ lodged on a cocoanut-leaf when shot.

Noted at the Subano village of Uluccas, on Sarangani Bay, northern Mindanao, P. I., February 16, 1904.

Caged Lorikeets were seen in Moro houses on the left bank of Tamia River, April 6, 1904; but no gold parrots of any kind were [illegible]

Noted from Kiangan Samir on Lake Lanao, at Camp Vicos, April [illegible]

(Sheet 11)

262. *Loriculus apicalis* Sonnancé. Mindanao Love-bird.

In the array of ~~Captain~~ Commander Frederick W. Hoffin, Commandant of the Pollok Naval Station, southern Mindanao, P. I., March 2, 1904, I saw fourteen of these nice pets.

Noted at Cottabato, Rio Grande Valley, southern Mindanao, March 2, 1904.

" " Kudarangan, " " " " 6, "

" between " and Barak, " " " 7, "

Many were seen between Camp Vicars and Malabang, April 11, 1904

Noted at Isabella, Island of Basilan, January 19, 1904.

Seen at Malabang, Mindanao, October 7-9, 1903.

Noted on the Buluan River, between lakes Liguasan and Buluan, May 21; also at the Moro village of Buluan, near Lake Buluan, May 21 and 22, 1904.

Quite a number were seen at the Malola and Numbawata rivers, on the trail from Buluan to Simpitan, as well as at the latter place, May 23 to 26, 1904. Some were also noted, between Buluan and Pandog, on the Buluan River, May 27, 1904.

At Surigao, northeastern Mindanao, April 20, 1904, many were seen, and one shot, in cocoanut trees; others April 21, 1904.

"One" was noted on the Tubay River, northern Mindanao, April 22, 1904.

Mr. Brown says it is abundant on Basilan Island

261. *Loriculus apicalis* Sonnerat.

Mindanao Love-bird or Lorikeet.

Numerous at Ayala, Mindanao, P. I., April 24, 1906.

I saw four Teen (14) of these lorikeets in the aviary of Commander Frederick W. Coffin, U. S. Navy, at Pilok Naval Station, southern Mindanao, March 2, 1904.

Abundant from the Koranaja March to Lakas, in the Libungan Valley, east of Cotabato, March 12 and 13, 1906.

Pinigs to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904.

A few were noted on Lake Maimit and along the Dubay River, northern Mindanao, April 22–24, 1904.

Buganga to Christian Ade's hemp plantation, 7 miles west of Buganga, eastern Mindanao, April 26, 1904.

Ade's Plantation to the River, eastern Mindanao, April 27, 1904.

Some were seen at the Manobanan village of Calac, on the Upper Calac River, eastern Mindanao, May 2, 1904; also head of Calac River in East Range of eastern Mindanao, May 3, 1904.

Tacuer River, eastern Mindanao (tributary to the Cagayan) May 4, 1904; also on the lower Bacuca River, May 4 and 5, 1904.

Yativa to Patrocino, Agusan River, Mindanao, May 7, 1904.

Vaniella, on the Agusan River, Mindanao, May 7 and 8, 1904.

Loriculus apicalis Souance.

Lake Linao, middle Agusan Valley, Mindanao.

"Many" were noted on the Agusan River, from Lake Linao to Talacogon, Mindanao, May 9, 19[illegible] and 11; Talacogon to Butuan, Agusan Valley, Mindanao, May 9 & 10, 1904; Agusan River below Butuan, Mindanao, May [illegible].

Birds supposed to be this species were common on Balut Island, of the Sarangani group, off southern Mindanao, Jan. 23 and Oct. [illegible]. Abundant at Coleel and on the lower Coleel River, east Mindanao, October 5, 1906. Specimen: No. 14370, ♀ ad. Chaplain Clemens collected it at Camp Keithley, Mindanao. Parang Parang, southern Mindanao, March 14, 1906. Buling, east shore of Davao Gulf, southern Mindanao, June 12, 1[illegible]. Sagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904. Sagulaya (sea level) to Toongahling (altitude 1,550 feet), on Mt. Apo trail, Mindanao, June 15, [illegible]; one shot at 650 feet, in bamboo.

Nos. 13702 and 13703 (erased) were taken from a nest above Toongah=ling (2000 feet altitude), July 13, 1904. No. 13703 (erased) was subsequently left alive at Davao.

Blue-crowned Lorikeet.

Loriculus galgulus (Linnaeus).

These birds were common on the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904; but the only ones obtained were a pair of caged birds purchased from a Moro native. These birds escaped at Zamboanga, Min=
=danao, but I shot and preserved the male (No. 13393).

263. *Loriculus bonapartei* Souance.

[illegible]

A number of these birds were seen on ~~this~~ ~~island~~ [illegible], February 21, 1904, along the trail connecting Datto Mpa's residence 3½ miles inland with his market at Bual by the sea.

(1 specimen of this genus was reported, ~~in 1903-4,~~ ~~by~~ from the island of Siassi, P. I., in 1903-'04, by Captain J. L. Smith, 17th Infantry, U.S. Army.

Noted on Sulu Island, between Jolo and Bud Dajo, October 11, 1906.

Manuk Manka Island, January 6, 1906.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

119-b (Sheet I.)

Loriculus philippensis (P. L. S. Müller).

Several of these birds were seen in cages in Manila, during July, and August, 1905; and, on August 19, 1905, I saw and heard two of them that alighted on a tall tree in the little park at the Cuartel de España, opposite my hotel.

Two, between Lavag and Dingras, Ilocos Norte Province, Luzon, January 16, 1907.

One seen near Lacay Lake, Ilocos Norte, Luzon, Feb. 5, 1907.

Rather uncommon at Mayparlain, Ilocos Norte Province, Luzon, February 15–March 9, 1907; specimens obtained; usually seen in cotton trees in the village; no more than 3 together.

Abundant in the enormous groves of cocoa-nut trees at Lucina, southern Luzon, March 30, 1907.

Several noted as seen about Dablaan and Kagillian, on trail from Bagiuio to Cap. Malaco, Luzon, ~~March~~ 19 and 20, 1907.

Camp Baler, east coast of Luzon, [illegible]

Pilitlot Springs, near Sibi, southeastern Luzon, [illegible]

Base of Mount Mayon, Albay side, Albay Province, Luzon, [illegible]

Loriculus philippensis dohertyi Hartert.

"I forgot to mention when you were here that Hartert described a *Loriculus philippensis dohertyi* from Basilan in Nov. Zool., XIII, No. 4, Dec. 22, 1906, 457."

"Chas. W. Richmond."

Isabella, Basilan Island, January 26 and 27, [illegible]
Camp No. 2 to Camp No. 3, Basilan Island, [illegible]
At Camp No. 3, Basilan Island, [illegible]
Camp No. 4 to Camp No 5, northwest Basilan, [illegible]
Camp No. 6, interior of Basilan, [illegible]
Tipo Tipo to Camp No. 8, interior of Basilan Isl., Feb. 3, 19[illegible]
, [site of Dorey's Camp 4, Jan. 30, 31, 1906], west coast of Basilan Island, March 3, 1906.

(Sheet I.)

Loriculus mindorensis Steere.

Several were seen on the trail from Naujan to the Naujan River, eastern Mindoro, March 25, 1907; and ~~returning~~, it was very common in cocoa-nut trees near the coast and town of Naujan.

One seen on the Alag River, Mindoro, Nov. 6, 1906.

Specimens were taken, in Mindoro, at: Subaan, Dec. 5 and 6; Calapan, Dec. 8 and 9, 1906.

Batrachostomus septimus Worcesteri
Zamboanga Frog-mouth.

Two seen, one shot at Paular, Mindanao.

At J.B. Isabella, Basilan Island January 26, 1906, I flushed the bird, and also examined feathers of one that was probably eaten by some bird of prey (feathers preserved).

Saw one at Mr. Henry Musser's plantation, 2 miles west of Isabella, Basilan Island, Feb. 22, 1906.

178. Eurystomus orientalis (Linnæus).
Broad-billed Roller.
Lah-sun' ~~sun~~ (Moros of Lake Lanao).
No. 12927 ♀ ad. Lah-sun' do
Sauk or Sock (Visayans of Baganga, eastern Mindanao).
Tahr-rock-sah'-kan, Bagobos of Mount Apo, Mindanao.
Noted along the road from Malabang to Camp Vicars (0 to 3000 feet), March 31, 1904.
Abundant at Cantar in Aug. & Sept., 1903. Feeds mostly on insects.
Noted at Baganga, eastern Mindanao, P. I., October 22, 1903.
" " Zamboanga, western " " December 13, 1903.
" on west side of Lake Lanao, " " November 2, "

Abundant on the Cabasaran River, southern Mindanao, P. I., January 30, 1904; also at the residence of Datto Salis Hasin, six miles inland and two miles from the Cabasaran River, January 31, 1904.

Common at Mincas, a Subano settlement at the mouths of two rivers, on Sarangani Bay, northern Mindanao, February 16, 1904.

I saw several of these birds on the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904; and Captain Langhorne, U.S. Army, in twice crossing the island on February 25th, reported seeing some of them. One pair occupied a dry tree on a hilltop near Mariano de Lions house, February 26.

178. Eurystomus orientalis (Linnaeus).

Broad-billed Roller.

Abundant at Iligan, Pantar, Marahui, and [illegible] Lanao in August and September, 1903.

Noted at Camp Vicars (3000 ft.), Mindanao, April 1, 1904.

" " Sauir, on Lake Lanao, " " " 2, "

Sauir to Rogayan, Tacacu Valley, Mindanao, April 3, 1904; again noted at Sauir, on Lake Lanao, April 9 and 10, 1904.

Many were seen along the wagon-road from Camp Vicars to Malabang, April 11, 1904. I saw them each butterflies in the air.

Noted near Marahui, Mindanao, September 27, 1903.

A number of them were seen at Camp Vicars (altitude about 2900 feet), September 28 and 29, 1903; also numerous along the road from Camp Vicars to Malabang, September 29, 1903.

Common on the Vicars-Malabang wagon road, from Matalung Falls to Malabang, Mindanao, Oct. 6, 1903.

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

" " Margosa Zubig, S. Mindanao, April 2, 1906.

" on the River, do do

Abundant from Dorana, a Marsh to Tubas, Libungan Valley, east of Cotabato, March 12 and 13, 1904.

Piangs to Barut, Rio Grande Valley, Mindanao, March 7-11, 1904.

178. Eurystomus orientalis (Linnæus).
Broad-billed Roller.

Noted from Pantar to Marahui, Mindanao, September 27, 1903.
Upper Libungan Valley, east of Cottabato, Mindanao, March 12-13, 1904.
Lake Mainit, northern Mindanao, April 24, 1904.
Tubay River, northern Mindanao, April 22-24, 1904.
Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.
One flock or family of about six noted, between Ade's plantation and the River, eastern Mindanao, April 27, 1904.

April 29, 1904, I shot an adult male near the Manobayan village of Candoos, in the East Coast Range of Mindanao. The specimen was skinned and preserved but afterwards destroyed. Its body was eaten, and its viscera made a successful bait for catching a specimen of the large, white-tailed rat which I subsequently described as Mus tagulayensis.

Abundant on the ~~[illegible]~~ Baccco River, a tributary of the Agusan, eastern Mindanao, May 4, 1904; also many on the lower Baccco River, at Tingalé, May 4-5, 1904, and thence (May 5) to the Agusan River at Compostela. May 6, 1904, many seen on the Agusan River from Compostela to Nativa; "very many" noted from Patrocinio to Varicella, on the Agusan, May 7, 1904; Varicella, May 7 and 8, 1904.

(Sheet IV.)

Eurystomus orientalis (Linnaeus).

Varicella to Lake Linao, Mindanao, May 8 and 9, 1904.

Lake Linao to Talacogon, Agusan Valley, Mindanao. May 9, [illegible]

Talacogon to the mouth of the Libang River, Mindanao, May 10, 1904.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, [illegible]

On Fuga Island, May 29 and 30, 1907, several were seen and one shot.

Abundant from Naujan, on the coast to Lake Naujan, eastern Mindoro, March 25, 1907.

Mouth of Baco River and Subaan, Mindoro, Nov. 1, 1906.

Subaan to the Benibi River, eastern Mindoro, Nov. 2, 1906.

Benibi River, Mindoro, Nov. 2 and 3, 1906.

Scarce on the Alag River, Mindoro, Nov. 5–8, 1906.

Buena Vista Hill, Camp No. , altitude feet, Mindoro, December 4 and 5, 1906.

Specimens taken, in Mindoro, at: Subaan River, Nov. 2; Subaan, Dec. 5, 1906.

Abundant on Balut Island, Darangani group, off southern Mindanao, Jan. 23 and Oct. 8, 1906, ranging up to above 2000 feet altitude. On Jan. 23, 1906, two specimens were obtained, one of which I am indebted to Major D. S. Stanley for shooting.

Toag-sack'-a, Jacanas of Basilan Id. (Sheet V.)

Eurystomus orientalis (Linnaeus).

Sah-ogg-sock'-i, Moros of Basilan.

Tahl-tach-sagh-on, Filipinos of Basilan

Abundant at Isabella, Basilan Island, January 26 and 27, 1906.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

Specimen collected at Camp No. 2 (No. 13223).

At Camp No. 3, Basilan Island, January 30, 1906.

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906; one.

Cumalarang River to Camp No. 6, interior of Basilan Island, February 1, 1906.

Tipo Tipo to Camp No. 8, interior of Basilan Island, February 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Malamani Island off Basilan Island, February 13, 1906.

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.

Buli Buli River to Camp No. 5, south Basilan, February 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Malusa, west Basilan, February 19, 1906.

Camp No. 7 to Camp No. 8, interior of west Basilan, February 20, 1906. Four were having a wedding party on the top of a tall, fire-blackened ~~stump~~ stump, and were screaming [illegible]

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's plantation, 2 miles west of Isabella, Basilan, Feb. 22, 1906.

(Sheet VI.)

Eurystomus orientalis (Linnaeus).

Lower Catubig River, north Samar, October 1, 1906.

Abundant at Burengo, Catubig River, north Samar, October 1, 1906.

Tanang, east Samar, October 3, 1906.

Abundant, one shot, on Bucas Island, off northeast Mindanao, October 4, 1906.

Abundant on the lower Cateel River, east Mindanao, October 5, 1906; two shot.

Common, one shot, at Manay, east Mindanao, October 6, 1906.

Sulu Island, from Jolo to Bud Dajo Peak, Oct. 11, 1906.

Two seen on Loran Island (off Ubian Island), October 12, 1906.

Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.

Balambing, Tawi Tawi Island, January 6, 1906.

Manuk Manka Island, January 6, 1906.

This bird has a sharp, harsh cry slightly suggestive of the Nighthawks'

Sibutu town, west coast of Sibutu Island, January 7, 1906.

Common on Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

, [near site of Dorey's camp 4, Jan. 30, 31, 1906] west coast of Basilan Island, March 3, 1906.

Zamboanga, western Mindanao, March 17, 1906.

Common, one shot, at Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

180. *Pelargopsis gigantea* Walden.

Giant Stork-billed Kingfisher.

Boh-koh'-ka (Visayan of Bantayan).

Sharpe gives "Sulu Id." record. I also saw one on [illegible] Quite numerous on Lake Lanao, and on the Agus River at Iligan, in Aug. & Sept., 1903. (at the mouth of a fresh-water creek near the beach.) I saw one on the island of Sulu, P. I., between Taglibi and Jolo, November 21, 1903. It was near the mouth of a small river. Jolo, Sulu, November 21-26, 1903. Noted at Maway, southern Mindanao, P. I., October 23, 1903, when a female was collected.

A number were seen at Makar and ~~Malangam~~ Bula, on the shores of Sarangani Bay, southern Mindanao, October 26, 1903.

On the Cabasaran River of southern Mindanao, this large Kingfisher was really abundant, Jan. 31, 1904.

Fairly common, February 16, 1904, on two rivers that enter Sarangani Bay, northern Mindanao, at the Subano ~~town~~ village of Musas. Two were shot by Captain Langhorne, U.S. Army.

Capt. Frank R. McCoy saw one at Santa Cruz, Davao Gulf, S. Mindanao, P. I., when returning from overland trip from Buluan, , 190[illegible]

180. Pelargopsis gigantea Walden.

Giant Stork-billed Kingfisher.

One was seen on Lake Lanao, near Camp Vicars, Mindanao, September 28, 1903.

Seen at Lake Butig, south of Lake Lanao, Mindanao, October 5 and 6, 1903.

April 22, 1904.—On commencing the ascent of the Lubay River, a "pair was seen sitting side-by-side on a snag that projected from the water. They were looking down, with their large bills pointed downward."

Numerous about Zamboanga, but shy, usually keeping away from houses & people.

Noted in Aug. & Sept., 1903 on the Agus R., at Camp Pantar (1800 ft.).

On the Lubay River and Lake Mainit, northeastern Mindanao, April 22 to 24, 1904, many of these large Kingfishers were seen, usually in pairs, sitting dejected, with head and spirits down, and allowing the native boats to glide close beneath them.

Lake Mainit, northeastern Mindanao, April 24, 1904.

On streams from Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

On a river (see Quackenbush's map for name) one day's march west from Ade's place, where we slept the night of April 26–27, 1904, some were noted.

(Pelargopsis gigantea Waldon.

Bah-eak'-ah Mandayas of eastern [illegible]

On April 29 and 30, 1904, as we marched up the Baganga River of Eastern Mindanao, this large Kingfisher was occasionally seen, although we saw no fish other than small gobies upon the rocks and pebbles in the bottom of shallow pools, although it is probable that there were larger fishes in the deeper waters. As we approached the headwaters of the Baganga, every now and then one of the large Kingfishers was seen.

Noted on the upper Cateel River at Calatagan, eastern Mindanao, May [illegible] This species ranged throughout the valleys of the Baganga and Cateel rivers reaching the headwaters in the East Coast Range.

Noted on the Bacuco River, a tributary of the Agusan River, eastern Mindanao, May [illegible]; also on the lower Bacuco River, May 4 and 5, 1904; also on the Agusan River at Compostela, May 5, 1904.

None were seen on the Agusan after leaving Compostela.

May 7, 1904.—Not seen on the Agusan River, except at Compostela.

May 9, " " " " "

Two, seen between Talacogon and the mouth of the Libang River, Mindanao, were the only ones seen on the Agusan River below Compostela.

(Sheet IV.)

Pelargopsis gigantea Waldon

Balut Island, Sarangani group, January 23 and October 8, 1906.

6 Miles west of Isabella, Basilan Island, January 28, [illegible]

Beluran Camp No. 3 and Camp No. 4, northwest Basilan, January 30, 1906, Captain Halstead Dorey and I each took a little native boat and paddled down to the mouth of a river ([illegible]) and saw many interesting birds. This huge-billed kingfisher was abundant, and I saved [illegible] (No. 13[illegible])

Jumaholbang River, south Basilan, February 16, 1906

Camp No. 5 to Camp No. 6, south Basilan, February [illegible]

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. [illegible]

~~Abundant, one shot, off~~ Bucas Island, ~~off~~ northeast Mindanao, October 4, 1906.

Abundant on the lower Cabcel River, east Mindanao, October 5, 1906.

Curaga, east Mindanao, October 6, 1906

Manay, east Mindanao, October 6, 1906.

Seen by General Wood on Loran Island (off Ubian Island), October 12, 1906

Bongao Island to Tawi Tawi Island, January 6, 1906

Mamuk Manka Island, January 6, 1906

Tibutu town, west coast of Sibutu Island, January 7, 1906, when a specimen was collected.

Pelargopsis gigantea Weldon.

Simalue Island, off Tawi Tawi Island, January 3, 1906; one on mangroves on off-lying coral flats.

Several seen, and a specimen collected, on Balak Balak Island, west of Basilan Island, January 10, 1906.

Grounds of officers' club, Jolo, Sulu Island, March 1, 1906.

Maimbung, and Siet Lake Beach, Sulu Island, March 1 and 2, 1906.

[near site of Dorrance's Camp 4, Jan. 30, 31, 1906] west coast of Basilan Island, March 3, 1906.

Pangpang, Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cuko Island, Iligat Bay, off south Mindanao, April 2, 1906.

(Sheet I.)

Pelargopsis gouldi Sharpe

Common on the Naujan River, Mindoro, March 25, 1907, when I shot two. Its note is very loud. A wounded one put up a good and clever fight in the water.

Numerous on the Benibi River, Mindoro, Nov. 3-5, 1906.

A few seen on the Alag River, Mindoro, Nov. 5-8, 1906.

Specimens taken, in Mindoro, at:

Benibi River at Camp No. 1, Nov. 3, 1906.

Two seen on an islet of Malampaya Sound, ~~east~~ west of Palawan Island, September 12, 1906.

(Sheet I.)

Alcedo isidori Linnaeus.
Common Kingfisher.

Lake Lanao, September, 1903.
Small blue & brown Kingfishers; [illegible]

Noted at Mati, southern Mindanao, P. I., October 23, 1903.

" " Manay, " " " " 23, "

Extremely numerous along the Rio Grande up to Lake Liguasan, Mindanao, October 19, 1903. It has a squeaky note, and commonly lights on coarse grass that borders the stream. In flight it is very pretty.

Noted at Davao, southern Mindanao, October 24, 1903.

Seen at Makar and ~~Matiyama~~ Bula, on Sarangani Bay, southern Mindanao, October 26, 1903.

Marching along ten miles of the beach on the island of Sulu, P. I., from Taglibi to Jolo, several small blue Kingfishers with brown breasts were seen. One or two looked smaller than the others; but the colors were ~~could~~ not ~~be~~ clearly seen. There may have been 2 species.
Jolo, Sulu, November 21-26, 1903

On in nipa swamp at Bamboanga, December 2, 1903.

One shot on Santa Cruz Island, off Bamboanga, Mindanao, December 5, 1903 (No. 13161) seemed different from others from Mindanao (compare specimens).

? Alcedo ispida

At Zamboanga, Mindanao, this little Kingfisher is less abundant than Halcyon chloris (?) It is a shyer bird, preferring shady shallow lagoons though not infrequently seen on the sea-wall close to houses. In fact I sometimes saw them along the part of the stream that passes through the busiest part of the town. Tide creeks in nipa swamps suit it admirably.

Noted at Buluan, on the mainland of Min=
=danao, opposite Buluan Island, January 31, 1904.

Quite numerous on the Cabasaran River, southern Mindanao, January 31, 1904.

Noted at Iligan, northern Mindanao, Feb. 15, 1904.

Noted at the mouths of two rivers entering San=
=dangan Bay at the Subano village of Mucas, north=
=ern Mindanao, P. I., February 16, 1904.

On the island of Cagayan Sulu, in the Sulu Sea, I saw a small blue Kingfisher with a brown breast on a little tide creek, bordered by nipa palms, behind the house of Señor Mariano de Leon, the Presidente. Later in the day (February 25, 1904) several small blue and brown Kingfishers were seen on a small stream in a man=
=grove swamp. One sat on a native boat, another on a stake beside a house on the edge of the sea.

Noted at Cottabato, Rio Grande Valley, Mindanao, March 3-5, 1904.

Lissocnus, A. bengalensis (Sheet III.)

Alcedo isphida? Probably, also some Ceyx.

Common Kingfisher.

Noted on a lofty stream near Rogayan, Tanca Valley, April 4, 1904.

Noted on the Tanca River below Malungan and at the monuments, April, 1904; again at Sauir, on Lake Lanao, April 10, 1904.

I saw one on the shore of Lake Lanao, ~~the~~ near Camp Vicars, Mindanao, September 28, 1903. (Altitude 2000 feet.)

Noted at Malabang (Matalang River), southern Mindanao, October 7 to 9, 1903.

Noted at Glan, southern Mindanao, October 26, 1903.

None were seen on the Rio Grande, from Lake Liguasan to the rivermouth, May 28 and 29, 1904.

Abundant about the remains of the moat around the city wall, Manila, October and November, 1905.

Seen on the D. Mindanao River, April 2, 1906 (Sulano Valley)

April 25, 1906. — Have seen none for some time past.

Noted on the Agus River, at Taular, Mindanao (altitude 1800 ft) Sept. 1903.

Noted on the Rio Grande between Pikings and Cotabato, March 18, 1904.

April 22-24, 1904. On the Tubay River and Lake Mainit, a few were seen.

"One small blue-and-brown kingfisher" was noted on the Agusan River, at the mouth of the Tibuton River, Mindanao, May 6, 1904.

[Possibly some are Cyx. (Sheet 18)

Alcedo ispida bengalensis

"One small blue-and-brown Kingfisher" was noted at Ifativa, on the Agusan River, Mindanao, May 6, 1907.

"One small brown Kingfisher with a blue head" noted on the Agusan River, between Ifativa and Patrocino, Mindanao, May 7, 1907.

Dagupan, Pangasinan Province, Luzon, Nov. 30, 1905.

One at Trinidad, at the altitude of 4500 feet in the highlands of Benguet, Luzon, December 3, 1905.

One near Pozorrubio, Pangasinan Province, [illegible]

Several seen near Dagupan, Pangasinan, [illegible]

It sometimes perched on the mud of the [illegible]

Many seen from Cocrimao to Laoag, in Ilocos Norte Province, Luzon, January 14, 1907.

Laoag River from Laoag to Dingras, Ilocos Norte, Luzon, January [illegible]

Dingras to Paoay, Ilocos Norte Province, Luzon, January 17, 1907.

" " Laoag to " 18, " 1907.

Laoag River, common from Laoag to the river mouth, Jan. 20-24, [illegible]

12 were counted between Laoag and Vintar Lake, January 24, 1907.

Abundant along the shores of Lake Paoay, Ilocos Norte Province, Luzon, January 27 and Febr. 5, 1907.

On river from Bojeador to Laoag, Ilocos Norte, March 9, 1907.

Two seen at Dagupan, Pangasinan Province, Luzon, Dec. 25, 1906.

Upper Bued River and Trinidad Lake, Benguet, December 24, 1906 to January 4, 1907.

Abundant on Lake Naujan and the Naujan River, Mindoro, March 25, 1907. Its note suggests that of Loriculus.

Calapan, Mindoro, October 31, 1906.

(Sheet V.)

Alcedo ispida bengalensis (Brisson).

Common on the Benibi River, Mindoro, Nov. 3-5, 1906.

Scarce on the Alag River, Mindoro, Nov. 5-8, 1906.

Specimens taken, in Mindoro, at: Camp No. 1, on the Benibi River, Nov. 4, 1906.

Isabella, Basilan Island, January 27, 1906.

6 Miles west of Isabella, Basilan Island, January 28, 1906

Camp No. 3, Basilan Island, January 29, 1906.

Abundant on the River, northwest Basilan, January 30, 1906. (Between Camps 3 and 4.)

Camp No. 7 (near Tipu Tipu), in the interior of Basilan Island, February 2, 1906.

Malamaui Island, off Basilan Island, Feb. 13, 1906.

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Two noted on as stream of northwest Basilan, between Camp No. 7 and Camp No. 8, February 20, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

General Wood shot specimen No. 14348, ♀ ad., at Lanang, east Samar, October 3, 1906.

Abundant on the lower Cateel River, east Mindanao, October 5, 1906.

Caraga, east Mindanao, October 6, 1906.

Simalue Island, off Tawi Tawi Island, January 8, 1906.

123 (Sheet .)

Alcedo isfida bengalensis (Brisson).
Zamboanga, Mindanao, January 11 and 12, 1906.
Polo, Maimbun, and Siet Lake Beach, Sulu Island, March 1 and 2, 1906.
[near site of Doran's Camp No. 4, of Jan. 30, 31, 1906] west coast of Basilan, March 3, 1906. Specimen.
Parang Parang, southern Mindanao, March 14, 1906.
Malabang, southern Mindanao, March 15, 1906.
Numerous on the shores and islets of Malampaya Sound, east Palawan Island, September 12, 1906.
Mouth of Mariquina River, Luzon, September 21, 1906.

(Sheet I.)

Alcyone cyanopectus (Lafresn

I shot one at the mouth of a small stream at Casiguran, east coast of Luzon, June 1, 1907.

Quite numerous on the Naujan River, eastern Mindoro, March 25, 1907. Three were shot. It seldom sat in the open, but usually flew out from a screen of branches at the side of the Naujan River. It was in such deep shadow that it was difficult to see one, even when I knew the spot where it had flown. It was not shy, but was concealed by the dark shadows. A female sat behind a screen of vines and continually dipped down to the surface of the water and back to the concealment of its perch with such celerity that the movement had the effect of a trout jumping. The movement was so swift that the eye could scarce follow it.

One was seen, December 1, 1906, on the Alag River, Mindoro, at the altitude of about 500 feet. It was on a slough near the main Alag.

Ceyx argentata Tweeddale.

Silvery Kingfisher.

Hahfi'-lah-hee-na (Moro of Zamboanga).

Several were seen on the Agusan River, Mindanao, between Nativa and Patrocino, May 7, 1904; one seen below Vaquella, on the Agusan River, Mindanao, May 8, 1904. I have only seen this kingfisher on the Tubay and Agusan rivers, in Mindanao.

On the Cabasaran River, southern Mindanao, January 31, 1904, "two birds were seen for the first time: a very small Kingfisher with a white breast xxxx".

Captain H. R. McCoy, U.S. Army noted one of these small Kingfishers on the Alip River, in southern Mindanao, late in May, 1904.

Three were seen on the Tubay River, northeastern Mindanao, April 22 to 24, 1904; one above, 2 below Santiago. On April 24 the I noted: "Between Jabanga and Santiago, a little black-and-white kingfisher darted across the stream. It was no larger than a Japanese sparrow."

One was noted on the upper Bacuco River, a tributary of the Agusan River, near its source in the west slope of the East Coast Range, Mindanao, May 4, 1904.

(Sheet 11.)

Ceyx cyanopectus Sharpe.

Silvery Kingfisher.

"Dawo about six", on the Agusan River, from ~~Loreotto~~ ~~to~~ Lake Linao to Talacogon, May 9, 1904; adult male shot by Captain McCoy. Testicles very large. Iris very dark brown. Bill black. Legs & feet 1-3 on each foot. Feet vermilion; claws brownish black. About the size of Lesser kingfisher.

None seen below Talacogon, on the Agusan River.

With the assistance of Captain Halstead Dorey, U.S. Army, I finally hunted down and obtained a fine example of this rare species on ~~the to~~ a small tributary of the lower Cabadbaran River, east Mindanao, October 5, 1906. Specimen: No. 14367, Bad.

Ceyx _____

One was seen on a stream at Camp No. 3, Basilan Island, January 29, 1906. Species the same as specimen No. 13981, from Musser's plantation a few miles west of Isabella Basilan, taken February 22, 1906.

Specimen No. 13958 was collected on a stream at Camp No. 6, Basilan Island, February 18, 1906.

Noted on a stream of northwest Basilan, between Camp No. 7 and Camp No. 8, February 20, 1906.

Mr. Henry Musser shot specimen No. 13981, ♂ad., on a small creek on his plantation, 2 miles west of Isabella, north Basilan, February 22, 1906.

(Sheet I.)

Ceyx melanura Kaup.

Nine sat on a limb in a clump of bamboo, beside the Lacay River, near Daniga, Ilocos Norte Province, Luzon, January 18, 1907. Just as I was going to shoot, it darted over the clay bank uttering a low twitter. I was so near that I could scarcely have mistaken it for any other species.

Halcyon coromandus (Latham). (Sheet 1.)

[illegible]

[illegible]

[illegible]

Kingfishers. — In Mr. Marquis L. Robb's collection, which I forwarded to the U. S. Nat. Mus., were two species that I did not see alive. They ~~may~~ were have been taken by Mr. Marquis L. Robb ~~Hunters on the island of Basilan (near Isabella)~~, or by Mr. Robb near Zamboanga, Mindanao. One was similar to the beautiful blue, white, black, and chestnut Kingfisher of Mindanao; but it had the underparts white instead of chestnut (Halcyon winchelli Sharpe). The other species was all chestnut, above and below (See specimens). The last was Halcyon coromandus (Latham). Both from Zam-

I followed a pair of Kingfishers supposed to be Halcyon winchelli Sharpe, at Zamboanga, Mindanao, [illegible], 1904; and one supposed to be this species was seen at Mercedes

In the Taraca Valley, near Rogayan, Mindanao, April 3, 1904, "A large Kingfisher, with reddish belly, red bill, much white [illegible]" [This may have been Halcyon gularis. What is the color of H. winchelli's bill? Look it up in the books.]

Near the Jumahokang River, south Basilan, Feb. 16, 1904.

193. Halcyon gularis (Kittl.).

[illegible]

White-breasted Kingfisher.

Slah-Kah'-aa (Moros of Zamboanga).

Seen near the Agus River at Marahui, Mind.

Common on the Agus River at Pantar, Aug. & Sept., 1903.

This Kingfisher I have never seen on salt water. In fact, I have often seen it away from water, but always in open country except when away from streams.

This gorgeously-colored Kingfisher was seen at various places along the Rio Grande, Mindanao, October 19, 1903; but probably no more than five or six were seen between Cottabato and Lake Liguasan.

Captain F. R. McCoy noted the occurrence of the "common blue and maroon Kingfisher" in the Alip River Valley and on the Davao side of the mountain divide beyond, in May and June, 1904.

Noted March 31, 1904, at Malaking Falls, below [illegible].

Noted in the Taraca Valley, near Ragayan, Mindanao, April 3, 1904.

Noted on the Taraca River below Malungan and at the river mouth, April 5, 1904. Noted on the Left Fork of Taraca River, as far up as Galauan, April 6, 1904. Noted between Galauan and Basayan, on the Taraca River, April 8, 1904; and one was noted at Basayan (near Ragayan) the same evening.

173. Halcyon gularis (Kuhl).

White-throated Kingfisher.

April 10, 1904. – On Lake Lanao, at Sauir, this Kingfisher was seen on the open water for the first time. I had always seen them inland before this.

A pair was seen near the Agus River at Camp Marahui, Mindanao, September 27, 1903.

A number were seen on the lowest portion of the Matalung River, at Malabang, Mindanao, Oct. 7–9, 1903.

Noted at Lake Butig, south of Lake Lanao, Mindanao, Oct. 5 and 11, 1903.

Noted on the Bulwan River, below the town of Bulwan, near Lake Bulwan, Mindanao, May 21, 1904; also between Bulwan and Lake Bulwan, May 22, 1904.

At the Dim-my-gall-ee River, on the trail from Bulwan to Simpitan, Mindanao, one was noted, May 24, 1904.

Descending the Bulwan River, May 27, 1904, some were seen between Bulwan and Pandog.

Noted at Surigao, northeastern Mindanao, April 20 and 21, 1904.

In ascending the Tubay River, northern Mindanao, April 22, 1904: "Three (1 pair)."

Abundant on Lake Macnit and throughout the course of the Tubay River, northeastern Mindanao, April 22 to 24, 1904. Some were tame enough to allow the native boats to pass close beneath them.

(Sheet III.)

Halcyon gularis (Kuhl).

Baganga to Christian Ede's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Compostella to Pilar, Agusan River, Mindanao, May 5, 1904.

Abundant from Pilar to Yativa, on the Agusan River, May 6, 1904.

" " Yativa to Patrocino, " " 7 "

A female shot between Patrocino and Varicella was ovipositing, May 7, 1904. "It is this kingfisher and not the bald-headed starling that utters notes like lesser yellowlegs."

Abundant from Varicella to Lake Linao, in the Agusan Valley, Mindanao, May 8 and 9, 1904.

Abundant from Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904; "doubtless breeds in a burrow in a bank, as such was seen where the laying female was shot yesterday."

Abundant from Talacogon to the mouth of the Libang River, Agusan Valley, Mindanao, May 10, 1904. Many bluff clay banks, suitable for nesting burrows, on this portion of the Agusan River.

Agusan River below Butuan, Mindanao, May 11, 1904.

Misamis, northern Mindanao, May 15, 1904.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

Camp Stotsenburg, Luzon, Nov. 28, 1905.

Dagupan, Pozorrubio, and Bued River, below Twin Peaks, Luzon, November 30, 1905.

(Sheet IV.)

Halcyon gularis (Kuhl).

At the bridge about a mile below Cadgauas, on the Bued River, Luzon, I saw one, December [illegible]

Several were seen on rocks along the Bued River, between Camp No. 4 and the canyon north [illegible]

Abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

Common on side pools of the Laoag River, Ilocos Norte Province, Luzon, January 16, 1907.

Abundant from Laoag to Dingras, Ilocos Norte, Jan. 16, 1907.

Hundreds were seen between Dingras and Paoay, Ilocos Norte, Luzon, January 17, 1907; often away from water; some sitting on the ground in freshly ploughed fields.

Dingras to Laoag, Ilocos Norte Province Luzon, January 18, 1907.

Laoag River Valley, below Laoag, do " 19, "

Common, Laoag Valley, below Laoag, do " 20-22, "

Common from Laoag to Vintar Lake, do " 23-24, "

Abundant everywhere from Laoag to Paoay Lake, Ilocos Norte Province, Luzon, January 27, 1907. Some were on the [illegible]

Abundant from Laoag to Paoay Lake, several on Paoay Lake, Ilocos Norte Province, Luzon, February 5, 1907.

Numerous from Laoag nearly to Bangui, Ilocos Norte, " 15. "

Quite common on several streams near and at Nagpartian, Ilocos Norte, Luzon, Febr. 21 to March 9, 1907. The only kingfisher seen at Nagpartian, from Febr. 15–Mar. 9, 1907. Its harsh notes often heard in the vicinity of Nagpartian.

Halcyon gularis (Kuhl).

Common, Nagpaltair to Laoag, Ilocos Norte, Luzon, March 9, 1907.

On the trail from Baguio to Camp Wallace, Luzon, ~~March~~ May 19 and 20, 1907, a number were seen from Subiaan to near the coast.

Very numerous on the Naujan River, Mindoro, March 25, 1907, where its terrible ~~cry~~ cries were heard during the night as we were paddled down the stream.

Lower Subaan River, Mindoro, Nov. 2, 1906.

Benibi River, Mindoro, Nov. 3 and 4, 1906.

One pair on the Alag River at Camp No. 2, Mindoro, Nov. 5-8, 1906.

Specimens taken, in Mindoro, at Subaan, Dec. 6; Camp No. 1, Benibi River, Nov. 3, 1906.

One shot, at Burengo, on the Catubig River, north Samar, October 1, 1907. No. 14305

Blue-white-bellied Kingfisher.

196. Halcyon chloris (Boddaert).

Pah-lass' (Moros of Lake Lanao). No. 12955 ♂ ad.

White-collared Kingfisher.

Ah'-dock, Bagobos of Santa Cruz, on the Gulf of Davao.

Noted at Malabang, southern Mindanao, June 31, 1904.

Abundant on the Agus River at Pantar, in Aug. & Sept., 1903.

Noted at Baganga, eastern Mindanao, P. I., October 22, 1903.

" " Manay, southeastern " " " 23, 1903.

" on the Rio Grande, Mindanao, from the river mouth up to Lake Liguasan, October 19, 1903. It was common there, frequently flying or perching in pairs.

Noted at Davao, southern Mindanao, October 24, 1903.

Numerous at Malalar and ~~Malagam~~ Bulu, on Sarangani Bay, southern Mindanao, October 26, 1903.

West shore of Lake Lanao, Mindanao, November 2, 1903.

North " " " " " 3, "

On the island of Sulu, P. I., this Kingfisher was seen as follows: From Siet Lake to the house of Hassan, the Panglima, November 13; from Hassan's to Upa's place; on the trail from Upa's house to a camp at the foot of Crater Mountain, near the cotta of Hassan, November 15, 1903; Jaglibi, November 20, 1903; common along the beach from Jaglibi to Jolo, a distance of 10 miles, Nov. 21, 1903.

Halcyon chloris (Boddaert).
White-breasted Kingfisher.

Common at Jolo, Sulu, November 2.-26, 1903.

On the island of Dangdang, off Sulu Island, November 25, 1903, several were seen.

Common on Tata Island, off Sulu, P. I., [illegible]

Common on Pangapuyan Island, off Mindanao, 12 miles east of Zamboanga, December 11, 1903; again noted December 19, 1903 and February 2, 1904.

December 7, 1903, Zamboanga. Abundant. Fond of the woods as well as the shores. In the trees it perches among the green leaves, and is hard to see. As a rule it shows little fear of man, even ~~see~~ occasionally entering houses built beside the water. Its harsh notes are continually heard; and its quarrelsome disposition is shown by its bullying attacks upon small singing birds.

Noted at the Subano village of Bung Bung, and on the Cabasaran River, southern Mindanao, January 30, 1904.

Noted at Bulnan, on the mainland of southern Mindanao, opposite Bulnan Island, Jan. 31, 1904.

Abundant along the shores of the Cabasaran River, and at the residence of Datto Salis Hassin, southern Mindanao, January 31, 1904.

Bulnan Island, off southern Mindanao, February 1, 1904.

Noted at Jolo, Sulu Island, P. I., February 4, 1904.

Noted at Dipulog, northern Mindanao, P. I., February 14, 1904.

196. (Sheet III.)

Halcyon chloris (Boddaert). [illegible]
"White-breasted Blue Kingfisher," noted at Lubungan, northern Mindanao, February 14, 1904.

Noted at Camp Overton, northern Mindanao, Feb. 15, 1904.

" " Iligan, " "

" " the Subano villages of Sindangan and Mucas, on Sindangan Bay, northern Mindanao, February 16, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Noted at Bual, Sulu Island, P. I., February 21, 1904.

Found on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, P. I., February 21, 1904.

Found on the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904. Most numerous on the edges of mangrove swamps.

Noted at Cottabato, Rio Grande Valley, Mindanao, March 3-5, 1904.

" " Kudarangan, " " " 6, "

Noted between Rogongan and Malungan, Taraca Valley, [illegible] below Ampuanalgad, cotta.

Noted on the Taraca River, Lake Lanao Basin, April 5, 1904; also at Galauan, on the upper Taraca, April [illegible]; and between Galauan and Buccayan, on the Taraca River April [illegible], 1904.

Noted at Isabella, Basilan, January 19, 1904.

Noted as common along the moat surrounding the city wall, at Manila, in August and September, 1904, and July 26 to , 1905. It was often seen in trees of the city parks, and very commonly perches on telegraph and telephone wires.

Halcyon chloris (Boddaert).

White-collared Kingfisher.

Noted on Lake Lanao, Mindanao, September 28, 1903.
Seen at Camp Vicars (altitude about 2900 feet) Sept 28 & 29, 1903.
Seen at Malabang, Mindanao, October 7-9, 1903.
Numerous at Glan, southern Mindanao, October 26, 1903.

Neither this nor any species of Kingfisher was seen on Lake Liguasan, Mindanao, May 17 to 19, 1904, notwithstanding the plentitude of other fish-eating birds. As we approached the Moro village of Buluan, on the upper Buluan River, May 21, 1904, a pair of these Kingfishers was noted as "the first Kingfishers seen since leaving the Rio Grande;" others were seen at Buluan, May 21 to 23, 1904.

Noted at Sumpitan, near Lake Buluan, Mindanao, May 24 and 25, 1904.

Descending the Buluan River, May 27, 1904, several were noted between Buluan and Pandog; and several were ~~noted~~ seen at Pandog.

Descending the Rio Grande, from Lake Liguasan to the rivermouth, May 28 and 29, 1904, a good many were seen.

Noted at Surigao and Placer, in northeastern Mindanao, April 20, 1904.
"Saw plenty" of them at Bacuag, northeastern Mindanao, April 21, 1904.

Halcyon chloris (Boddaert).

White-collared Kingfisher.

Seen at Tubay, northeastern Mindanao, April 22, 1904.
In ascending the Tuby River, April 22, 1904, "many".
Noted at Zamboanga, western Mindanao, July 24 to Aug. 1, 1904.
" " Davao, southern Mindanao, July 15 to 20, 1904.
Abundant about Manila, during October and November, 1905.
Seen at Jolo, Sulu, March 26, 1906.
Seen on Malanipa Id., off S. Mindanao, April 1, 1906.
" " Cabo and Fatima islands, Igat Bay, off S. Mindanao, P. I., April 2, 1906.
A number were seen on Little Santa Cruz Island, off W. Mindanao, P. I., April 11, 1906.
Abundant at Ayala, Mindanao, P. I., April 24 1906.
Common at Pantar, Mindanao (altitude 1800 feet) in Aug. & Sept., 1903.
Several were seen in the vicinity of Labas on the upper Libungan River, east of Cotabato, March 12 and 13, 1904.
Prangz to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904. Seranaya Fort, March 11-13, 1904.
Noted on the Rio Grande at the mouth of the Estero which drains the Seranaya Marsh, March 14, 1904.
One pair noted, on the Rio Grande, between Prangz and Cotabato, March 14, 1904.
Noted at Lake Mainit, northern Mindanao, April 24, 1904.

Halcyon chloris (Boddaert).

Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Misamis, northern Mindanao, May 12, 1904.

Jimenez, northern Mindanao, May 12, 1904.

Langaran, northern Mindanao, May 13, 1904.

Baliangao, on Murcielagos Bay, northern Mindanao, May 13, 1904.

Manila, P. I., August 17 to September 15, 1904, and Dec. 14.

Dagupan River, Pangasinan Province, Luzon, Nov. 30, 1905.

Camp Jossman, Island of Guimaras, December 24, 1905.

Jolo, Sulu Island, January [illegible].

Abundant on three small islets off the south end of Sibutu Island, January 5, 1906.

One, on Paoay Lake, February 5, 1907, was the first that I had seen in Ilocos Norte Province, Luzon.

Two seen, February 25, 1907, at the mouth of the Boran River; Ilocos Norte Province, Luzon.

One on Boran River, do March 9, 1907.

Several on the Dagupan River, Pangasinan Province, Luzon, Dec. 23, 1906.

Streams at base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

At Tabaco, Albay Province, Luzon, March 29, 1907.

I saw perched upon a large cross in the ground at a large church.

Abundant at Lucena, southern Luzon, March 30, 1907.

Halcyon chloris (Boddaert).

Abundant, ~~March~~ May 20, 1907, along the beach from San Fernando to Camp Wallace, Luzon.

San Fernando, La Union Province, Luzon, May 20-25, 1907.

Aparri, northern Luzon, May 29, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Baler, east coast of Luzon, June 2, 1907.

Tibi, southeastern Luzon, June 3, 1907.

Tabaco, Albay Province, Luzon, June 4, 1907.

A few were seen on the Island of Balabac, P. I., May 27, 1907, when one was shot by William Dorr Carpenter.

Common on Huga Island, P. I., May 29 and 30, 1907.

Common from Naujan to the Naujan River, eastern Mindoro, March 25, 1907.

Calapan, Mindoro, October 31, 1906.

Mouth of Baco River, and Dubaan, Mindoro, Nov. 1, 1906.

Specimen: No. 14594. ♂ad. Corregador Island off Manila Bay, Dec. 16, 1906.

On my first visit to Palmas Island, January 21, 1906, I saw none, and natives said that no kingfisher was resident on the island; but, on October 7, 1906, a number were seen and two shot by General Wood and one by the writer.

(Sheet VIII.)

Halcyon chloris (Boddaert).

Sarangani Island, off southern Mindanao, January 23, 190

Balut Island, Sarangani group, January 23, 1906 and October 8, 1906. On the latter date one was shot by Dr. Paul C. Freer.

Isabella, Basilan Island, January 26 and 27, 1906

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 190

Camp No. 2 to Camp No. 3, Basilan Island, January 29.

At Camp No. 3, Basilan Island, January 30, 190

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Malamani Island, opposite Basilan Island, February 13, 1906.

Isabella, Basilan Island, February 13, 1906

Tipu Tipu, interior of Basilan Island, February 15, 1906

Dumahobang River, south Basilan, February 16, 190

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906

Maluso, west Basilan, February 19, 1906.

Camp No. 7 to Camp No. 8, interior of west Basilan, Feb. 20, 190

Camp No. 8 to Camp No. 9 (Musser's plantation), north Basilan, Feb. 21, 190

Mr. Henry Musser's residence, near Isabella, Basilan, Feb. 22, 190

Lower Cutubig River, north Samar, October 1, 1906.

Cajougan Island, off north Samar, October 2, 1906, ~~when~~ ~~No. 14335, ♀ ad., or was collected~~, when one was shot.

Borongan, east Samar, October 3, 1906.

Capt. C. L. Crosby, Master of the Mindanao, shot specimen No. 14352, ♀ ad., at Lanang, east Samar, Oct. 3, 1906; ~~1896~~ ~~and~~ when others were shot, and many others seen.

Halcyon chloris (Boddaert).

Abundant, one shot, on Bucas Island, off northeast Mindanao, October 4, 1906.

Abundant on the lower Cateel River and at Cateel, east Mindanao, October 5, 1906.

Caraga, east Mindanao, October 6, 1906.

Manay, east Mindanao, October 6, 1906.

Several in the crater of Bud Dajo, Sulu Island, Oct. 11, 1906.

Siasi Island, October 12, 1906.

Many seen on Loran Island (off Ubian Id.), October 12, 1906.

Tumindao Island (off Delankli Island), October 13, 1906, when I collected No. 14426, ♀ad. "Small and blue."

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

Lumbucan Island, October 16, 1906 (Genl. Wood).

Corregidor Island, Manila Bay, December 16, 1906.

On April 28, 1907, General Wood attempted to land on Iborgat Island. Two sailors got ashore. The danger to the ship's boats was so great that the attempt to land our party was discontinued and the only land bird observed was this kingfisher.

Sibutu town, west coast of Sibutu Island, January 7, 1906.

Siatu, Siasi Island, January 9, 1906.

East Bolod Island, Sulu Sea, January 10, 1906.

Jolo, Sulu Island, January 9, 1906.

Halcyon chloris (Boddaert).

A number were seen, and a specimen taken, on Balik Balik Island, January 10, 1906.
Zamboanga, Mindanao, January 12, 1906.
Jolo, Sulu Island, ~~January~~ March 1, 1906.
Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Dit Lake Beach, March 1 and 2, 1906.
, [near site of Dorsey's camp No. 4, January 30, 31, 1906] west coast of Basilan Island, March 3, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Lower Rio Grande, southern Mindanao, March 15, 1906.
Malabang, southern Mindanao, March 15, 1906.
Private Daniel West shot one at Zamboanga, Mindanao, March 17, 1906, and skinned it for himself. (I think this is the unlabelled skin that Dr. Richmond wrote me about.)
Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.
Cebu Island, Iyot Bay, off south Mindanao, April 2, 1906.
Hatima Island, Dumanquilas Bay, off S. Mindanao, April 2, 1906.
San Ramon, and Ayala, west in Mindanao, August 27, 1906.
Many were seen on Mactan Island, off the east coast of Cebu Island, September 3, 1906.
Camp Connell, ~~east~~ west coast of Samar Island, Sept. ~~15~~ 5, 1906.

(Plate XI.)

Ah'-dock, Bagobos of the west shore of the Gulf of Davao, Mindanao.

Halcyon chloris (Boddaert).

Abundant, 2 specimens taken, on Cuyo Island, September 10, 1906.

Common on the shores and islets of Malampaya Sound, ~~east~~ west Palawan, September 12, 1906.

Marinquina Valley, Rizal Province, Luzon, September 17, 1906.

Manila, Pasig, Taytay, and Cainta, Luzon, September 21, 1906.

Common at Dulig, on the east shore of the Gulf of Davao, June 12, 1904.

Davao, southern Mindanao, June 13, 1904.

Common, June 14, 1904, at Tagulaya, southern Mindanao, where, as at Zamboanga, the Visayan Filipinos call it "Martin Pescado-Azul".

Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

Camp Overton, northern Mindanao, July 9, 1904.

Pair noted at Camp Connell, near Calbayog, west coast of Samar Island, July 12, 1906.

Tacloban, Leyte Island, July 24, 1906.

Dulag, east coast of Leyte, July 25, 1906.

Camp Overton, northern Mindanao, May 7, 1906.

197 Halcyon hombroni (Bonaparte).

Hombron's Kingfisher.

Bah-kah'-kah, Bagobos of Mount Apo, Mindanao.

One was seen in the forest, near Pantar, Mindanao (altitude 1800 feet), August 11, 1903.

Several Kingfishers seen along the upper courses of the Baganga and Cateel rivers, in eastern Mindanao, were probably this species. A specimen was shot (No. 13527) at about 6000 feet altitude on Mt. Apo, Mindanao, P.I.

202. Hydrocorax mindanensis (Tweeddale).
Great Mindanao Hornbill.
Calao is the name used by Spaniards and Filipinos.
Kal-ow' (Moro).
[No. 128,886 ♂ad. Joang-cah'-go (Moro of Lake Lanao); [illegible] Black Hornbill (Common, [illegible]).]
Was noted along wagon-road from Malabang to Camp Vicars (0 to 300 feet), March 31, Dreadnut at Pantar, Marahui, and N. side L. Lanao, Aug. & Sept.
Noted at Zamboanga, Mind., Oct. 10-16, 1903. Brown birds (??).
Brown, ~~birds~~ and big, black Hornbills were noted at Baganga, Mindanao, P. I., October 22, 1903.
One big brown Hornbill was noted on the Rio Grande above Cottabato, Mindanao, October 19, 1903.
Large black, and brown Hornbills were noted at Davao, southern Mindanao, October 24, 1903.
Seen and heard all along the wagon-road from Malabang to Camp Vicars (23 miles), November 1, 1903.
Black and brown ones seen on the Cabasaran River, southern Mindanao, January 30, 1904. Also at Bulnan, on the mainland of southern Mindanao, January 31, 1904.
Black and brown Hornbills seen at the residence of Datto Salis Hasan, six miles inland and two miles from the Cabasaran River, January 31, 1904.
Brown and black birds at Iligan, Mindanao, Feb. 15, 1904.

130 and 134 (Sheet 11.)

~~Ceratogymna bucephalus~~ (Vieillot) and

202. Kal-ow': Moros of Lake Lanao.
Hydrocorax mindanensis (Tweeddale).

Kal-ow': Moros of Lake Lanao.
"Black and Brown Hornbills" were noted at Sindangan, on Sindangan Bay, northern Mindanao, P. I., February 16, 1904.

"Brown Hornbills" were noted, February 16, 1904, at the mouths of two rivers which enter Sindangan Bay at the Sa=bano village of Mucas, in northern Mindanao, P. I.; and a black one was shot by Captain Langhorne.

"Brown and Black Hornbills" were noted at Santa Maria, northern Mindanao, P. I., February 17, 1904.

Captain F. R. McCoy, U. S. Army noted a "great many" of these Hornbills in the Alip River Valley and on the Davao side of the mountain divide, in May and June, 1904.

Large flocks of these oriental red-billed Hornbills were seen across the road between Maibang and Camp Vicente-Sotto, March 31, 1904. Many were killed.

Many seen and heard, on the trail from Buluan (near Lake Buluan) to Simpitan, and at the latter place, Mindanao, May 23 to 26, 1904.

~~Noted at Dav~~ Seen at Marposa Zubig, S. Mindanao, P. I., April 2, 1906.

Abundant on the wagon road from Iligan to Lake Lanao, in August and September, 1903.

Hydrocorax mindanensis (Tweeddale).
(Mindanao Great Hornbill.

Flocks were noted between Camp Vreeland and Malabang, April 1904.

Observed near Camp Marahui, Mindanao (altitude 2400 feet), September 27, 1903.

Seen at Buldung, Mindanao, Oct. 1 and 2, 1903.

Many seen on the trail from Buluan (near Lake Buluan) to Simpitan, and at the latter place, May 23 to 26, 1904.

Seen on the River, near Dulano village, April 2, 1906.

Abundant on the Iligan-Lake Lanao wagon road (sea level 2400 feet) during August and September, 1903.

Labas, Libungan Valley, east of Cotabato, March 12, 1904.

Piagas to Barak, near Deranaya Marsh, Mindanao, March 7-11, 1904

On the Tubay River (outlet of Lake Mainit), northeastern Mindanao, on April 22, 1904, a flock of 14 soared across the river valley. Afterwards noted as "common" on Lake Mainit and the Tubay River, April 22-24, 1904.

Baganga to Christian Alde's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

"Myriads" were noted from Alde's hemp plantation west to the River, eastern Mindanao, April 27, 1904.

Hydracorax mindanensis (Tweeddale).

Plenty of Hornbills were heard on the march from the River to the Mandayan village in the East Coast Mountains of Mindanao, April 28, 1904. On April 29 and 30 they were still abundant on the upper Baganga River.

Noted on the upper Calcol River, at Calalagan, eastern Mindanao, May 2 and 3, 1904; also in the source of the Calcol in the East Coast Range, May 3, 1904.

Abundant on the Baoco River, eastern Mindanao, May 4, 1904; one was shot; also noted as abundant at Tingali on the lower Baoco River, and thence to Compostela, May 4 and 5, 1904.

Many flocks on the Agusan River, from Pilar to Jativa, May 6, 1904; many flocks at the mouth of the Libuton River.

Abundant on the Agusan River, Mindanao, from Jativa to Patrocino, May 7, 1904.

Abundant from Las Piñas to Talacogon, on the Agusan River, Mindanao, May 9, 1904.

Abundant from Talacogon to the mouth of the Libang River, Agusan Valley, Mindanao, May 10, 1904; one shot fell to the ground, then climbed up through a tall bush and flew strongly away just as a native boy was about to lay hands on it.

(Sheet IV.)

Hydrocorax mindanensis (Sharpe).

Mr. Marquis L. Robb obtained specimens on the Island of Basilan, where I also found it in abundance.

~~Dried River Valley, above Twin Peaks, Luzon, Nov.~~ 300 Dec. 1, 1905.

Isabella (Basilan Island, January 26 and 27, 1906.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906; specimen (No. 13921) shot at Camp No. 3.

[Note.—"Three genera [of hornbills] in Basilan."

I saw only Hydrocorax and Penelopides.]

(At Camp No. 3, Basilan Island, January 30, 1906.

Camp No. 4 to Camp No. 5, northwest Basilan, Jan. 31, 1906; one.

Camp No. 6 to Camp No. 7 (near Sipu Sipu), in the interior of Basilan Island, February 2, 1906.

Sipu Sipu to Camp No. 8, interior of Basilan Island, Feb. 3, 1906.

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Id., Febr. 14, 1906.

Camp No. 2 to Camp No. 3 (at Sipu Sipu), Basilan Id., Feb. 15, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.

Buli Buli River, south Basilan, February 17, 1906.

Camp No. 5, south Basilan, February 17 and 18, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

1200 (Sheet V.)

Hydracorax mindanensis (Tweeddale).

Maldsa, west Mindoro, February 19, 1906.

Camp No. 7 to Camp No. 8, northwest Basilan, Feb. 20, 1906.

Camp No. 8 to Camp No. 9 (Musser's plantation), north Basilan, Feb. 21, 1906.

Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.

Abundant on Bucas Island, off northeast Mindanao, October 4, 1906, when several were shot by our party; but they were spoiled, owing to the giving out of ice on ship, before I found time to skin them. The identification, therefore remains in doubt.

Abundant on the lower Cateel River, east Mindanao, October 5, 1906, when one was shot ~~#~~.

October 6, 1906.— At Caraga, east Mindanao, had mounted one in his house.

Manay, east Mindanao, October 6, 1906.

At Zamboanga, I had some photographs of a young Calao made at the "Siang Photographic Studio", by Mrs. D. Encinas. Bill: Dated "April 5th, 1906," for "2 Neg. and three prints each $4.50."

1st Lieutenant Gerrit Van S. Quackenbush, 23d Infantry, early in November, 1904, noted "hundreds of calaos" on the Rio Grande above Piket, Mindanao.

Balut Island, Sarangani group, January 23, 1906.

Philippine Hornbill.

207. Penelopides affinis Ferrddale.

Captain H. R. McCoy, U. S. Army, found this species abundant in the Alip River Valley, southern Mindanao, P. I., about the end of May, 1904.

One shot at Pantar, Mindanao

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

One was shot at the Subano village on River, near Margosa Tubig, S. Mindanao, April 2, 1906.

~~Libungan~~. Lubas, Libungan Valley, east of Cotabato, March 12, 1904.

Ade's plantation to the River, eastern Mindanao, April 27, 1904.

Noted at Pinigali, on the lower Bacoca River, in the interior of Mindanao, and thence to Compostela, May 4 and 5, 1904.

One was noted between Pilar and Yalwa on the Agusan River, Mindanao, May 6, 1904.

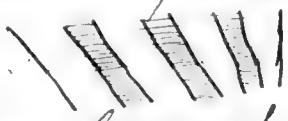
In flocks on the Agusan River between Yalwa and Patrocino, May 7, 1904; called Boo'-by by our Mandayas.

In flocks on the Agusan River from Lake Linao to Talacogon, Mindanao, May 9, 1904.

One flock noted, just below the mouth of the Libang River, Agusan Valley, Mindanao, May 10, 1904.

(Sheet III.)

Penelopides affinis Ogilvie-Grant.

Numerous at Daling, on the east shore of the Gulf of Davao, June 12, 1904: No 13493, ♂ad. Iris dark red. Ridge process of maxilla reddish brown shading to whitish at base and pale reddish laterally where it joins the maxilla proper; maxilla dark red-brown on basal half, pale olive on terminal half; mandible red-brown at base above, pale olive on terminal half, with intermediate space area crossed by four whitish oblique ribs,  separated by three black grooves, the extreme base of mandible below being red. Feet olive-plumbeous; claws plumbeous-black. Measurements: 580; 780; 245; 225; 100; depth of bill at base, 38; 45; 47.

Davao, southern Mindanao, June 13, 1904.

From sea-level at Sodaya up to 1750 feet altitude on the base of Mount Apo, Mindanao, where I collected specimen No. 13504, ♂ad., June 15, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

(Sheet I.)

(Penelopides basilanica Steere.

Mr. Marquis L. Robb obtained a specimen for the U. S. National Museum, on the Island of Basilan.

Near Isabella, Basilan Island, January 26, 1906.

Numerous at Camp No. 3, Basilan Island, January 29 and 30, 1906

Many seen between Camp No. 4 and Camp No. 5, northwest Basilan, January 31, 1906.

Camps No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.

204 Penelopides { affinis Tweeddale. ~~panini (Boddaert)~~ }.

Ing-yet', Bagobos of Todaya, Mount Apo, Mindanao.
Common, one shot, at Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906; Specimen No. 14301, Sad.

At Malabang, southern Mindanao, P. I.

Cook, Sergeant First Class, Hospital Corps, U. S. Army, showed me the skin of a small Calao that appeared to be this species. It was shot at Mataling Falls, between Malabang and Lake Lanao. Its head was dark. Reward!

In my memorandum, made at the time, I said: "Hosp. Sergeant Cook has a black Hornbill with white-banded tail & small size."

Very abundant on Bucas Island off northeast Mindanao, October 4, 1906, when some were shot by our party, but were not preserved.

Abundant on the lower Calcel River, east Mindanao, October 5, 1906, when 6 were shot, and specimen No. 14378, Sad., shot by Captain Halstead Dorey, was preserved. General Wood brought in 3 dark-colored birds, with the skin of face and chin blue instead of white. These were females. I had supposed, previously, that they belonged to a different species.

(Sheet I.)

Penelopides mindorensis Steere.

Subaan and lower Subaan River, eastern Mindoro, Nov. 2, 1906.

Lower Subaan River, Mindoro, Nov. 2, 1906.

Specimens taken, in Mindoro, at: Subaan, Dec. 6; Calapan, Dec. 9, 1906.

(Sheet I.)

Craworrhinus Cavatus Lakes (Vieillot).

White-headed Black Hornbill.

Kal-yew'-uh, Bagobos of Sodaya, Mount Apo, Mindanao.

This large species was abundant at Paitan, Mindanao, in August and September, 1903.

Several were shot and eaten on the Sonir, above Compostella, Agusan River Valley.

Many of these splendid red-billed Hornbills were seen flocking near the military road from Malabang to Camp Vicars, March 31, 1904; especially numerous near Malabang.

Noted from Camp Vicars to Sonir, on Lake Lanao, Mindanao, April 2, 1904.

Sonir, on Lake Lanao, and in the Taraca Valley at Rogayan, April 3, 1904.

Noted at Huahulama's cotta, Taraca Valley, April 7, 1904.

Flocks trooped past us as we rode from Camp Vicars to Malabang, April 11, 1904.

Noted near Marahui, Mindanao, September 27, 1903.

Abundant along the wagon-road from Camp Vicars to Malabang, September 29, 1903.

Abundant at Bulbulung, Mindanao, Oct. 1 and 2, 1903.

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

On the upper Libungan River, east of Cotabato, March 12, 1904, I saw one clinging to a big dead tree in the attitude of a Woodpecker. It was feeding its mate whose bill could be seen in the opening:

"One seen feeding its mate in a large, hollow, dead tree, where it had the appearance of a huge Woodpecker." Libungan River to Seranaya, March 13, 1904.

(Sheet II.)

Cromorrhinus leucocephalus (Vieillot).

Abundant on the Baoco River, a tributary of the Agusan River, eastern Mindanao. One was shot and many were seen on May 4, 1904, also in large flocks at Tingali, on the lower Baoco, and thence to Compostela, May 4 & 5, 1904.

Many flocks on the Agusan River, from Pilar to Talisa, May 6, 1904.

Talisa " Patrocino, " 7, "

Abundant, in large flocks, on the Agusan River from Lake Linao to Talacogon, Mindanao, May 9, 1904.

Abundant from Talacogon to the mouth of the Libang River, Mindanao, May 10, 1904.

Suliq, east shore of the Gulf of Davao, southern Mindanao, June 12, 1904.

Davao, southern Mindanao, June 13, 1904.

(Sheet I.)

americanus (P. L. Müller.)

212. Merops bicolor Boddaert.

Chestnut-and-green Bee-Eater.

One was shot and many seen in flocks on a river at Mincas, on Dindangan Bay, northern Mindanao, February 16, 1904.

Flocks of these beautiful Bee-Eaters were seen from Malabang to Malaling Falls, Mindanao, March 31, 1904. Above Malaling Falls all of the Bee-Eaters seen were M. philippinus.

From Camp Vicars to Sonir on L. Lanao, (no species of Merops) none were seen April 2, 1904.

No Merops was noted in Lake Lanao Basin, April 1 to 10, 1904

Not noted, returning from Camp Vicars to Malabang, April 11, 1904.

Large numbers of this exquisite, beautiful and graceful bird frequented the target range at Malabang, southern Mindanao, October 7 to 9, 1903. The commoner species, M. philippinus, was not noted.

Flocks of these Bee-Eaters occupied groves of trees bearing linear jointed leaves along the Vicars-Malabang wagon-road, between Malaling Falls and Camp Seven, Oct. 6, 1903.

Among thousands of Bee-Eaters seen on Lake Liguasan, Mindanao, in May, 1904, there were none of this species.

Flocks seen at Davao, southern Mindanao, July 15 to 20, 1904.

One was shot at San Ramon Farm (Government Experimental Farm), Zambanga District, March 23, 1906.

Merops americanus P. L. Müller.

Chestnut-and-green Bee-Eater.

Flocks were frequently seen at the target range, 4 miles from Zamboanga, Jan. to April 9, 1906. On the last date 3 were shot, the ♀ with developing eggs.

Breeding at Ayala, Mindanao, P. I., April 24, 1906. In pairs. A female shot contained an egg.

A few were seen on the Subang River and on the shores of Lake Mainit, in northeastern Mindanao, April 22-24, 1904.

Compostela to Pilar, Agusan River, Mindanao, May 5, 1904.

Many flocks, Pilar to Jativa, on Agusan River, May 6, 1904.

" " Jativa to Patrocino, " " "

Between Patrocino and Varicella, on the Agusan River, many large colonies were found breeding in the river bank, May 7, 1904.

Many were seen issuing from round burrows in the bluff banks of the Agusan River, at many places, from Talacogon to Libang River, Mindanao, May 10, 1904.

Agusan River below Butuan, Mindanao, May 11, 1904.

One flock noted at Nagillian, Luzon, ~~March~~ May 20, 1907.

Pili Hot Springs, near Sibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4, 1907.

Abundant on the trail from Naujan to the Naujan River, Mindoro, March 25, 1907; also on the Naujan River the same day.

(Sheet III.)

Merops americanus P. L. Müller.

Specimens taken, in Mindoro, at: Camp No. 3, altitude 2250 feet, Nov. 10; Subaan, Dec. 5.

Very abundant at Burengo, on the Catubig River, north Samar, October 1, 1906, when I shot two.

Abundant on the lower Cateel River, east Mindanao, October 5, 1906.

Abundant at Malabang, southern Mindanao, March 15, 1906.

Ayala, western Mindanao, August 27, 1906.

213. Merops philippinus Linnaeus.
Philippine Islands Bee-Eater.
Philippine Bee-Eater; Blue-tailed Bee-Eater.
Pee-lee-kah' (Moros of the Rio Grande de Mindanao).
Very abundant at Pulas and Maralini, in Aug. & Sept., 1903.
Noted at Zamboanga, Mindanao, P. I., October 10-16, 1903.
Very abundant on the Rio Grande, Mindanao, Oct. 19, 1903.
They circled gracefully about our launch, somewhat in the manner of Swallows. There were thousands of them! Noted between Malaling Falls and Camp Vicars, Mindanao, 1903.
Noted at Davao, southern Mindanao, October 24, 1903.
When crossing the Island of Sulu from Panglima Hassan's to Upa's place, November 14, 1903, Bee-Eaters were numerous; less so along the trail from Upa's cotta to Crater Mountain. Common at Jolo, Sulu, November 21-26, 1903.
Common at Zamboanga, Mindanao, December 2, 1903.
Noted at Buluan, on the mainland of southern Mindanao, January 31, 1904.
Seen on the East six miles of the Cabasaran River, southern Mindanao, Jan. 31, 1904.
Noted at Dipulog, northern Mindanao, February 14, 1904.
" " Lubungan, " " " " ", in flocks at evening.
Noted at Santa Maria, northern Mindanao, February 17, 1904.

Philippine Bee-Eater; Blue-tailed Bee-eater. (Sheet II.)

213. Merops philippinus Linnaeus.

Noted near Bual (Datto Upa's market), Sulu Island, P. I., February 21, 1904.

Noted at Cottabato, Rio Grande Valley, southern Mindanao, March 3-5, 1904.

" " Kudarangan, " " " " 6, " .

Abundant at Pantar Marahui in Aug. & Sept., 1903.

On the Malabang-Vicars wagon-road this species replaces Merops americanus above Malabang Falls.

No Merops was seen on Lake Lanao, from Camp Vicars to Sonir — possibly has gone to its breeding-places on the rivers. Not noted in Lake Lanao Basin April 6 to 10, 1904, nor between Camp Vicars and Malabang, April 11, 1904.

Noted at Isabella, Island of Basilan, January 19, 1904.

Seen, in numbers, on telegraph wire from Pantar to Marahui, Mindanao, September 27, 1903.

Bee-eaters, supposed to be this species, were noted between Camp Vicars and Malabang Falls, September 29, 1903.

Lake Liguasan, Mindanao. — May 17, 1904: "Merops philippinus is continually passing our little steamboat." May 18: There was one flock of several hundred Merops philippinus. M. americanus is not here, at least at this season. A small tree, the only one at the place, was simply loaded with Bee-Eaters. Others were awing, or settled amongst the rank cogon grass beside the outlet of Lake Liguasan into the Rio Grande. They twit

Merops philippinus Linnaeus.

Philippine Bee-Eater; Blue-tailed Bee-Eater.

=ter, more harshly, but like a flock of Swallows.
May 19: "Bee-Eaters are very abundant on Lake Liguasan."

Noted on the Buluan River, connecting lakes Buluan and Liguasan, Mindanao, May 20, 1904, also on Lake Buluan, May 22. Also noted on the trail from Buluan to Simpitan and at the latter place, May 23 to 26, 1904.

It was again noted in abundance when descending the Buluan River, from Buluan to Lake Liguasan, May 27, 1904. One large flock was seen on the river; and an enormous colony was found breeding in the buff bank at the outlet of Lake Liguasan, close to the Rio Grande.

Very numerous on the Rio Grande from Lake Liguasan to the river mouth, May 28 & 29, 1904.

I saw Bee-Eaters that appeared to be this species, at Surigao, northeastern Mindanao, April 20 and 21, 1904.

Many were seen in the cogonal extending from the Koranaya Marsh to Labas on the Libungan River, east of Cotabato, southern Mindanao, March 12 & 13, 1904.

Pairs to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904. In flock: down to the mouth of the Rio Grande, same date.

(Sheet IV.)

Merops philippinus Linnaeus.

Many were seen, most of them on telegraph wires, along the Manila and Dagupan Railroad, between Manila and Camp Gregg, July 29 and 30, 1905.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

Camp Hetzenburg, Luzon, Nov. 28, 1905

Pozorrubro, Pangasinan Province, Luzon, Nov. 30, 1905.

Camp Rossman, Island of Guimaras, [illegible]

From Currimao to Laoag, Ilocos Norte, Luzon, January 4, 1907.

On Pairs, near the Laoag River, below Laoag, Jan. 16, 1907.

Laoag to Dingras, Ilocos Norte, Luzon, January [illegible]

Near streams, from Dingras to Badson, Ilocos Norte Province, Luzon, January [illegible]

Common from Dingras to Laoag, Ilocos Norte, Luzon, January 18, 1907.

Laoag River Valley below " " " " " [illegible]

Common, Laoag Valley, below Laoag, do Jan. 20-22, 1907.

" " to Vintar Lake, do " 23-24 "

Abundant on Paoay Lake and at several places between Paoay Lake and Laoag, Ilocos Norte Province, January 27, 1907.

Abundant from Laoag to Paoay Lake, and especially so about the lake, February 5, 1907.

Laoag to Nagpartian, Ilocos Norte Province, Luzon, Febr. 15, 1907.

Burdett Manganese Mine, extreme NW. point of Luzon, Febr. 19, 1907.

Nagpartian, Ilocos Norte, Luzon, Febr. 15 to March 9, 1907.

" to Laoag, " , March 9, 1907.

Merops philippinus Linnaeus. (Sheet V.)

Lumbayan to Bud. Lumbayan, Lanao, Jolo, Feb. 2, 1906.

Some were seen at our camp on the Nagillian River above the town of Nagillian, ~~March~~ May 19 and 20, 1907.

Isabella, Basilan Island, January 26 and 27, 1906.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

Camp No. 3 to Camp No. 4, northwest Basilan, January 30, 1906.

Abundant from Camp No. 4 to Camp No. 5. Basilan Island, January 31, 1906.

Tipo Tipo to Camp No. 8, interior of Basilan Island, February 3, 1906.

Camp No. 8 to La Milan, north Basilan, February 5, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Malusa, west Mindoro, February 19, 1906.

Camp No. 7 to Camp No. 8, west Basilan, Feb. ~~19~~ 20, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.

Sulu Island, from Jolo to Bud Dajo Peak, Oct. 11, 1906.

Zamboanga, Mindanao, January 12, 1906.

During the first week of March, 1906, a great flock composed of hundreds of bee-eaters assembled at Zamboanga, and made a great outcry as they circled over the post before going to roost. Flocks also 1906, Aug. 31,

(Sheet VI.)

Merops philippinus Linnaeus.

Common on Sulu Island, from Jolo to Bud Dajo, Maimbun, Crater Lake, and Dit Lake, March 1 and 2, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Lower Rio Grande, southern Mindanao, March 15, 1906.
Catarman, Cottell, west coast of Samar Island, September 5, 1906.
Quite numerous in the Mariquina Valley, Rizal Province, Luzon, September 17, 1906.

Lyncornis mindanensis Tweeddale.
Mindanao Eared Nightjar.

A bird supposed to be this species was seen near Camp Marahui, Mindanao, at the altitude of about 2400 feet, September 27, 1903.

"A large whippoorwill with white-banded wings, and darkly colored" was seen on Mount Arnold Hague, east of the divide over the mountains (Carazao Pass) between Boldung and Lake Butig, southern Mindanao, October 4, 1903.

One was seen (shot at twice) near Zamboanga, April 9, 1906.

Seen on the Libungan River, east of Cotabato, March 12, 1904.

Abundant at camps Nos. 2 and 3, Basilan Id., Jan. 28 and 29, 1906. Specimen 13926 ♀ad. was shot at Camp No. 2.

At Camp No. 3, Basilan Island January 30, 1906.

Heard during the night of February 14-15, 1906, at Camp No. 2, interior of Basilan Island.

Camp No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.

Jumahobang River, south Basilan, Feb. 16, 1906.

Buli Buli River, south Basilan, Feb. 16 and 17, 1906.

Camp No. 5, south Basilan, Feb. 17 and 18, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Heard at Margosatubig, southern Mindanao, March 13, 1906.

affinis mindanensis [illegible]

214. Caprimulgus ~~manillensis~~ J. R. Gray.

~~Manila Goatsucker~~ [illegible]

Lake Mainit, northern Mindanao, April 24, 1904.

Seen on the Libungan River east of Cotabato, March 12, 1904.

There was a great flight of these Goatsuckers on the left bank at the mouth of the Malalung River, at Malabang, southern Mindanao, P. I., October 18, 1903. The birds acted like Whippoorwills, flying up with a startled note and quickly dropping down among the shrubbery.

One or two Goatsuckers, seen near the summit of Mt. Arnold Hague, between Parang and Lake Buliig, Mindanao, October , 1903, appeared to be slightly larger and considerably darker than those secured at Malabang. They were flushed from waterworn gulleys in tall cogon grass.

This species, or one closely resembling it, was noted on Mt. Sulieman, Sulu Island, November 19, 1903.

Rowing down the last six miles of the Cabasaran River of southern Mindanao, January 31, 1904, two "large Goatsuckers" were seen catching insects over the water.

A Goatsucker, probably this species, was seen near Marahui, Mindanao, September 27, 1904.

Caprimulgus grisatus Wald.

In January and February, 1907, in some bushy hills north of Laoag, in Ilocos Norte Province, Luzon, I saw a number of birds of this species. They usually flew up from open spaces between the bushes and darted over the ridge so quickly that it was difficult to shoot them. They uttered a hollow note on taking wing, and sometimes alighted on branches near the ground though usually directly upon the ground. Specimen: No. 14707

Base of Mount Mayon, on the Legaspi side, Albay Province, Luzon, March 28, 1907.

Left in the Bureau of Science: Specimen No. 14707

(Sheet II.)

Caprimulgus affinis mindanensis Mearns

Mindanao Nightjar.

Nightjars were heard at Calatagan, on the upper Cotcot River, eastern Mindanao, May 2-3, 1904.

May 5, 1904. - Below Compostela, a short distance, the Agusan River, Mindanao, was obstructed by a transversely fallen tree whose roots had been undermined by the river current. The straight trunk of this fallen monarch of the woods measured 6 feet in diameter and 120 feet from the roots to the branches. Root and branch the tree must have stood at about 240 feet. We were obliged to disembark from our barotas, in order to pass this obstruction; and, in going around, I collected 2 eggs of this goatsucker from the sand, among the branches of this fallen tree. Eggs preserved.

Numerous on the sandy shores at the mouth of the Malaling River, southern Mindanao, March 15, 1906; finds shelter under bushes. At the mouth of the Malaling River, near Malabang, southern Mindanao, March 15, 1906, I saw many Mindanao Nightjars, and collected a young of the year, nearly fully feathered. Two eggs were found, at different places, on the soft, dry sand at the rivermouth. One was

Caprimulgus affinis mindanensis Mearns.
fresh, the other stale and partly dessicated. They are practically alike, and measure: 31 by 21 and 29 by 22 millimeters. Shape slightly elliptical ovate. Ground color creamy white; smeared and blotched, sparingly at the small end and thickly at the great end, with drab-gray and faint clay color.

Major Hartert.)

226. Macropteryx ~~comata (Temminck)~~.
; Tufted Tree-Swift.

Long-gom (Filipinos (Visayans) of Baganga, Mindanao).

Noted at Baganga, eastern Mindanao, P. I., October 22, 1903. Scores of these exquisitely beautiful little birds were feeding, towards evening, in the shade of an enormous, partially decayed tree near the beach. Individuals would tire of flight and alight on dry twigs of the old tree for long rests.

Common on the wagon-road between Malabang and Mataling Falls, ~~November~~ March 31, 1904; returning April 11, many were seen perched on telephone wires and dry twigs of trees.

Tufted Tree-Swifts were frequently seen, sitting singly, on telegraph wire in the forest between the Mataling Falls and Malabang, Mindanao, October 6, 1903.

Olde's plantation to the River, eastern Mindanao, April 27, 1904.

Red River canyon, above Twin Peaks, Luzon, Dec. 1, 1905.

Camp Roseman, Iwinara 2, December 24, 1905.

One flock between Twin Peaks and Tolgana, Luzon, Dec. 24, 1906. Frequently alighted on trees.

(Sheet II.)

Macropteryx major Hartert.

Near Isabella, Basilan Island, January 26, 1906.
Near Camp No. 2, west of Isabella, Basilan Is., January [illegible]
Common at Burengo, Calubig River, north Samar, Oct. 1, 1906.
Flock around a tall dry-topped tree on the ocean beach, many alighting on the dry twigs like wood-swallows, at Manay, east Mindanao, October 6, 1906.
Abundant at Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Oberholser is about to describe this as new. 141 (Sheet I.)

Whitehead's Swiftlet.

? Collocalia whiteheadi Oberholser.

The "larger dusky Swift" was noted on Pangapuyan Island off Mindanao 12 miles east of Zamboanga, Feb. 2, 1904.

"Two species of all dark Swifts, large and small, were abundant on the Cabasaran River, southern Mind, Jan. 30, 1904.

The "larger dusky Swift" was very abundant on the last six miles of the Cabasaran River, southern Mindanao, January 31, 1904.

"Larger dusky Swifts" were numerous at Iligan, northern Mindanao, February 15, 1904.

"Greater Swifts" [than Collocalia fuciphaga] were seen between Pantar and Marahui, Mindanao, Sept. 27, 1903; also between Camp Vicars and Malaluig Falls, Sept. 29, 1903.

"Long tailed, dusky Swifts" were noted at the Malala and Mumbawata rivers, on the trail from Buluan to Simpitan (near Lake Buluan), Mindanao, May 23 and 24, 1904;

The "larger dusky Swift", noted in my journal of April 20, 1904, at Placer, northeastern Mindanao, may have been this species.

Pierce to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904; near Pierce, same date.

Collocalia whiteheadi (Mindanao form; see Oberholser).
Lake Mainit and the Tubay River, northern Mindanao, April 22-24, 1904. During the storm of April 23, 1904, one of the severest in the history of Mindanao, immense numbers of this species, and doubtless others of the genus, as well as Tachornis, sought the shelter of the canyon of the Tubay River, and flew low over the water.

Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.
Ade's plantation to the River, eastern Mindanao, April 27, 1904.
Abundant on the upper Agusan River at Compostela, in the interior of Mindanao, May 5, 1904.
Agusan River from Pilar to Jativa, Mindanao, May 6, 1904.
" " " Jativa to Petrocino, " " 7, "
" " below Butuan, Mindanao, May 11, 1904.
Bued River Canyon, above Twin Peaks, Dec. 1, 1905.
Baguio, Benguet Province, Luzon, Dec. 1 to 12, 1905.
Trinidad, " " " " 3, ".
Hundreds flew about the peak of Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.
Meade Road, Benguet Province, Luzon, Dec. 13, 1905.
Dingras to Padsan, Ilocos Norte, Luzon, January 17, 1905.

Collocalia whiteheadi

See-ping'-oh, Igorotes of Benguet.

Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

Large flocks high in air in Laoag River Valley below Laoag, " 18.

Laoag Valley, below Laoag, Ilocos Norte, Luzon, January 20-22, 1907.

Many flying above a ridge between Laoag and Vintar, Feb. 7, 1907.

Laoag to Magpartian, abundant; Ilocos Norte, Luzon, Febr. 15, 1907.

Abundant at Magpartian, do Feb. 15-March 9, 1907.

" " Kaia, Ifu-in-the-oats, Benguet Province, Luzon, from July 20 to August 3, 1907. Quite always flitting about Haight's meadow that he calls "The Plaza", where I shot 4 in 5 shots. It swallow-surprisingly large fly: a insect.

Numbers were seen in a grassy opening at the foot of Vanto Thomas Peak, Benguet, Luzon, at an altitude of 5250 feet, January 1, 1907.

On the trail from Baguio to San Fernando, it was very abundant about the divide near Baguio and some as far down as Subtoan, Luzon, ~~March~~ May 17, 1907

Cusiguran, east coast of Luzon, June 1, 1907

Baler, east coast of Luzon, June 2, 1907

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907

Base of Mount Mayon, Tobaco side, Albay Province, Luzon, June 4 and 5, 1907

(Sheet IV.)

Collocalia whiteheadi Grant

Collocalia whiteheadi Grant, Ibis, 1895, p. 459.

Oberholser (Proc. Acad. Nat. Sci, Philadelphia, 1896, p. gives the following: "Geographical distribution. — Islands of Luzon and Palawan, Philippine Islands."

No swifts were seen on Palmas Island when I landed on January 21, 1906; but a small flock was flying about the top of the highest hill on October 7, 1906, when I collected a specimen: No. 14394, ♂ad., Palmas Island, October 7, 1906. This I compared with a series of Collocalia whiteheadi from Benguet Province, Luzon, and found "scarcely any difference. . . . . The Swift (No. 14394) from Palmas Island is a trifle dark but, otherwise, like a large series from Luzon, labelled Collocalia whiteheadi by McGregor.

Collocalia unicolor amelis

Collocalia unicolor amelis [illegible], Proc. Acad. Nat. Sci., Philadelphia, 1896, p. 194.

Type locality - Irisan, Benguet, May 19, 190 .

Mr. Oberholser says: "Aside from the above [localities], Collocalia u. amelis is not at present certainly known except from the Island of Guam, where taken by Dr. E. A. Mearns, July 20, 1905, and from the Philippine archipelago, where it has been obtained on the Islands of Luzon, Verde, Cagayancillo, Sibuyan, Panay, Mindoro, Mindanao, and Palawan."

In table of measurements Oberholser mentions a specimen from "Mindanao, P. I., Nov. 28, 1887."

Collocalia francica germani Oustalet

Abundant on Cuyo Island, Sulu Sea, September 10, 1906.

Under Collocalia francica germani Oustalet (Page 201 of Oberholser monograph of the genus Collocalia) Mr. Oberholser says (Proc. Acad. Nat. Sci., Philadelphia, 1896, p. 202): "A series of birds from Trong, Lower Siam, another from the Philippine archipelago seem to be identical, and together are certainly all referable to this race, although a few of those from Cagayan Sulu, in the southwestern Philippines, are more blackish above and show in this, but not in size, some vergence toward Collocalia francica terraereginae. There are examples in the United States National Museum from the following of the Philippines: Panay; Cagayan Sulu; and Cagayancillo, in the Cagayanes group. It has also been recorded a Collocalia francica from Cuyo, Negros and Calamianes. All Philippine records of both francica and inexpectata refer of course to germani." (Oberholser.)

A swift, apparently this species, was very abundant at Sandakan, Borneo, October 14, 1906, when I also noted a larger species of swift.

On Cagayan Sulu Island, October 15, 1906, many were flying around the house of the Collector of Customs in company with Hirundo javanica. Specimen No. 14436 was collected.

(Sheet I.)

Collocalia francica inexpectata (Hume).
(Andaman Islands x Swiftlet.

Swift.

On Cagayan Sulu, an island in the Sulu Sea, February 25, 1904, I noted: "Hundreds of pale-throated Swifts darted around and over the highest cliffs." Later they were found in abundance about a small fresh-water pond in a grassy crater-basin. Many seen and four shot, February 26. Colors light on throat and rump. Very abundant. Specimens Nos. 13377 to 80.

? Collocalia

The swifts found in caves near the summit and roosting at the summit of Mount Apo, Mindanao, were different from the two species collected lower down on the mountain.

(Sheet V.)

Collocalia fuciphaga fuciphaga (Thunberg).

A swift similar to this, and larger than the Swiftlets, was found on the divide of the Halcon ridge and nearly up to the summit of Halcon Peak, perhaps up to 8800 or 8900 feet.

A "few" were noted as Collocalia fuciphaga at Camp No. 3, altitude 2250 feet, Mt. Halcon, Mindoro, Nov. 28 to 30, 1906.

Specimens taken, in Mindoro, at: 14458 Buena Vista Hill, Camp No. , altitude feet, Nov. 5; No. 14465, Camp No. 3, altitude 2250 feet, Nov. 10. 1906.

Collocalia No. 13961, collected between Camp No. 5 and Camp No. 6, south Basilan, February 18, 1906, when the species was abundant, flying over cultivated fields on a low hilltop:

Abundant at Manay, east Mindanao, Oct. 6, 1906, when Dr. Paul C. Freer shot No. 14381, ♀ ad.

Collocalia fuciphaga, East Bolod Island, Sulu Sea, January 10, 1906; also West Bolod Island, Sulu Sea, January 10, 1906.

Lower Rio Grande, southern Mindanao, March 15, 1906.

Cuyo Island, Sulu Sea, September 10, 1906.

Tagulaya, west shore of Davao Gulf, S. Mindanao, June 14, 1904.

Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

Collocalia marginata and other Swiftlets.

Specimens taken, in Mindoro, at: No. 14455, Camp No. 1, Benibi River, Nov. 4;

Dark-rumped form: Antipolo, Rizal Province, Luzon, September 21, 1906.

Noted as "Least Swift" at Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904, when it was abundant.

Todaya, 4000 feet, Mt. Apo, Mindanao, June 17, 1904.

At the Junction of the Soo-boo-ahn' and Sal-ooh-soó-bahn rivers, Mt. Apo trail, Mindanao, July 13, 1904, altitude 2025 feet, many were seen. The Bagobos said their nests are in the cliffs and their eggs white.

(Sheet 1.)

Collocalia origensis Oberholser.

Kal-ahn-tee'-pahk, Bagobos of Todaya, Mount Apo, Mindanao.
Collocalia origensis Oberholser, Proc. Acad. Nat. Sci., Philadelphia, 1896, p. 191.

Based on 4 adults and one nestling, collected on Mount Apo, Mindanao, at 4000 feet altitude, by Edgar A. Mearns, July 4, 1904.

Noted as C. whiteheadi at Davao, Mindanao, Jan. 22, 1906.

The large, dusky swift, called Cal-ahn-tee'-pach by the Bagobos, was said to build on cliffs. Four adults were brought in to me at Camp Goodfellow, which the Bagos said were taken from a hollow tree.

(Sheet 1.)

Collocalia troglodytes Gray.

Many at Nagpartian, Ilocos Norte, Luzon Feb. 20-23, 1907.
In his monograph of the genus Collocalia (Proc. Acad. Nat. Sci., Philadelphia, 1896.), Mr. Oberholser gives: "Geographical distribution. - Philippine Islands."
Abundant at Burengo, Catubig River, north Samar, Oct. 1, 1906.
Abundant at Panang, east Samar, October 3, 1906.
Very abundant on Bucas Island, off northeast Mindanao, October 4, 1906, when I collected Nos. 14356-8.

(Sheet 1.)

Collocalia marginata Salvadori

Oberholser gives the following: —

"Type locality. — Cebu Island, Philippine Islands.

"Geographic distribution. — Philippine Islands."

"Up to the present time it has been ascertained to occur on the following islands: Cebu, Masbate, Luzon (McGregor), Mindoro, Calayan, and Dibuyan."

(Sheet I.)

Collocalia fowi (Sharpe).

Type locality.—Labuan Island, northern Borneo.

This, probably, is the species I saw at Sandakan, Borneo. Oberholser gives Palawan Island in its distribution, but no other Philippine Island.

It is also, probably, the species seen with C. linchi insonata on Mamuk Manka Island, January 6, 1906.

Collocalia linchi isonata Oberholser.

Type locality.— Irisan, Benguet, Luzon, P. I.

"This form of Collocalia linchi appears to be confined to the Philippine Archipelago, and has been taken on only Luzon, Mindoro, Mindanao, and Bongao.

Abundant on Manuk Manka Island, off Tawi Tawi Island, January 6, 1906.

Sibutu town, west coast of Sibutu Island, January 7, 1906.

Nos. 13678, 13725, 13726, and 13727, taken at Todaya, 4000 feet altitude on Mount Apo, Mindanao, in July, 1904, were called Pong-pong' and also Dedd-dett' by the Bagobos. The Swift which the Bagobos called Kahl-lee-bohs'-bos is probably the species that I found in caves near the summit of Mount Apo, and which I was unable to collect, although some were shot which fell over a cliff.

(Sheet I.)

Collocalia ~~[illegible]~~ fuciphaga (Thunberg).

[illegible] Swift, Pandan, Mercedes, etc.

Indian Edible-nest Swiftlet; Edible-nest Swiftlet.

Impounded at Paniao, Mindanao, in Aug. & Sept., 1903.

No Swift was seen in Sulu Island, Nov. 12-26, 1903.

"Small Swift like Chaetura pelagica" noted at Zamboanga, Mindanao, P. I., October 10-16, 1903.

["Edible birds' nests are made by a Swift of the genus Collocalia." (Handbook of British North Borneo. Ed. 1890)]

Colonel Van Orsdale informed me that Swifts of some kind breed in caves at Cottabato. On October 19, 1903, when I steamed from Cottabato up to Lake Liguason, no Swifts were seen.

Zamboanga, Dec. 7, 1903. No Swift was seen in Sulu; but, in similar country, and especially about rice paddies, at Zamboanga great numbers are seen gathering insects that arise from the rice towards evening.

"Swifts" were seen flying around San Sofia, a Spanish fort at Margossatubig, on Dumanquilas Bay, southern Mindanao, January ~~29~~ 30, 1904.

"Small, dark Swifts" were noted at Bung Bung, also on and the Cabasaran River, southern Mindanao, P. I., January 30, 1904.

(Sheet II)

Indian Esculent Swiftlet; Edible-nest Swiftlet.

Collocalia linchi linchi (Thunberg).

"Small, dusky Swift." Noted at Dipulog, northern Mindanao, P. I., February 14, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Swifts of some kind were noted by Captain H. R. McCoy, in the Dalip River Valley, southern Mindanao, in May, 1904.

"Dusky Swifts" were noted at Cottabato, in the Rio Grande Valley, of southern Mindanao, P. I., March 3 to 5, 1904.

Noted along the wagon-road from Malabang to Camp Vicars, Mindanao, P. I., March 31, 190[illegible] Vicars, April [illegible], 190[illegible]

Noted from Camp Vicars to Sauir, on Lake Lanao, April [illegible], 190[illegible]

A few were seen in the Tanaca Valley between Dalanan and Basayan, April 8, 1904; and some were again noted at Sauir, on Lake Lanao, April 9 and [illegible]

Noted between Camp Vicars and Malabang, Mindanao, April [illegible]

Noted from Pantar to Marahui, Mindanao, September 27, 1903.

Abundant at Malabang, southern Mindanao, Oct. [illegible], 190[illegible]

Abundant at Manila, P. I., during the first week of September, 1905.

May 20 to 22, 1904, on the Buluan River, connecting lakes Buluan and Liguasan, I "saw a few [Edible-nest] Swifts."

At the Malala River, on the trail from Buluan to Simpitan, Mindanao, May 23, 1904, many were seen at evening; also seen at the same place, when returning, May 26th.

Collocalia fuciphaga (Thunberg).

Indian Esculent Swiftlet; Edible-nest Swiftlet.

At Manila, Luzon, P. I., August 17 to 21, 1904, a rather large, long-tailed, plain sooty swift was seen in flocks over the park and city. Not large enough to be C. whiteheadi.

Noted at Camp Vicars, Mindanao (altitude about 2900 feet) September 28 and 29, 1903.

Noted at Cararao Pass, at the summit of the mountains between Parang and Lake Buliq, Mindanao, October 4, 1903.

Noted at Placer, northeastern Mindanao, April 20, 1904.

A good-sized flight of Swifts passed over my house in the Malate suburb of Manila, September 17, 1905.

When ascending the Tubay River, northern Mindanao, April 22, 1904, "many."

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

"Exceedingly numerous" on the Tubay River, northern Mindanao, April 22, 1904.

Abundant at Zamboanga, Mindanao, March 27, 1906.

Abundant on the River, near the Sulano village, S. Mindanao, April 2, 1906.

Ayala, Mindanao, P. I., April 24, 1906.

Abundant at Pantar, Mindanao, Aug. & Sept., 1903.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904; near Piangs, same date.

? Lacoag Valley below Lacoag, Ilocos Norte Province, Jan. 20–22, 1907.

Pili Hot Springs, near Tiwi, southeastern Luzon, June 3, 1907.

(Sheet IV.)

Collocalia fuciphaga fuciphaga (Thunberg).

Oberholser says (Proc. Acad. Nat. Sci., Philadelphia, 1896, pp. 185-187):—

"Type locality.—Java."

"A single specimen from Guam Island is, however, much more brownish above than any of the others examined and may represent an undescribed race." (Oberholser.)

In tabulated measurements, p. 187, specimens from Mercedes, Mindanao, Dec. 19, 1903 and Pantar, Mindanao, Aug. 13, 1903, are mentioned. These, doubtless, were collected by me.

Subaan to Benibi River, eastern Mindoro, Nov. 2, 1906.

Flights occurred on the Alag River, Mindoro, Nov. 5-8, 1906. See No. 14458 for identification.

Constantly flying about Camp No. 3, on Manyyan clearing on ridge at 2250 feet altitude Nov. 8-12, 1906.

Between Camps No. 2 and 3, north of Mt. Halcon, Mindoro, November 8, 1906.

Abundant in Manyyan clearing, altitude 3000 to 3300 feet, on a spur of Mount Halcon, Mindoro, Nov. 12 and 13, 1906. (See specimens 14458 and 14465 for identification.)

Often seen at Camp No. 5, altitude 4500 feet, on a spur of Mount Halcon, Mindoro, November 13-17, 1906.

Oustalet is about to describe this as new. (Sheet I.)

Cinchi Horsfield and Moore.

Collocalia ~~marginata Salvadori~~.

Cinchi Swiftlet.

Several were seen at the Government Experimental Farm at San Ramon, Zamboanga District, Mindanao, March 23, 1906. Seen at Pantar; hills near Zamboanga; Baganga and Cateel rivers; north shore of Mindanao, etc. Specimen (No. 13) taken at Todaya, at altitude 4000 feet, Mt. Apo, Mindanao, P. I.

Flocks of "small wood Swifts" were noted in the foot=hills back of Zamboanga, Mindanao, P. I., October 10-16, 1903.

Numerous, circling above and among the cocoanut trees at Dipulog, northern Mindanao, February 14, 1904. Many were seen between Camp Vicars and Malabang, April 11, 1904. Noted between Camp Vicars and Matalung Hills, Mindan=ao, September 29, 1903.

At the government corral, near Malate Barracks, a suburb of Manila, I saw a small Swift having white on side of rump which may have been this species, August 21, 1905. ~~This was~~

Noted at Surigao, northeastern Mindanao, April 20, 1904. When flying away from one, this Swift shows a little white. ~~on the~~ Two seen at Manila, September 26, 1905.

(Sheet II.)

Collocalia linchi Horsefield and Moore.

Least Swallow-Swift.

Seen on the River, near the Subano vil-
=lage, April 2, 1906.

Zamboanga, April 9, 1906.

One species of the linchi group was abundant at Pantar, Mindanao (alt. 1800 feet) in Aug. & Sept., 1903

From Cole's Plantation west to the River, eastern Mindanao, April 27, 1904.

April 28, 1904. — After marching all day we camped on the Bagauga River, where we saw many tiny dusky Swiftlets coursing about.

April 29 and 30, 1904. — On the Bagauga River, eastern Mindanao, were many small swiftlets, with glossy backs, showing a little white when flying away. They were usually seen flitting over the stream.

May 4, 1904. — Abundant on the Bacoca River, eastern interior of Mindanao, May 4, 1904, when I noted: "it shows a little white when flying away from one."

Lanoran, northern Mindanao, May 13, 1904.

Baliangao, on Murcialagos Bay, N. Mindanao, May 13, 1904.

Bued River Valley, Luzon, Nov. 30 and Dec. 1, 1905.

Abundant around Baguio, Benguet Province, Luzon, December 1–12, 1905.

Trinidad, altitude 4500 feet, Benguet, Luzon, Dec. 3, 1905, when they came down over the rice fields in great numbers, with Collocalia whitehead, during a hard shower.

(Sheet III.)

Collocalia marginata and other Swiftlets.

One species was abundant from Nanjan to Lake Nanjan, eastern Mindoro, March 25, 1907.

Abundant on the Benibi River, Mindoro, November 3-5, 1906. See specimen No. 14455 for identification.

Alag River, Mindoro, Nov. 5-8, 1906; see specimens.

At Camp No. 3, Mangyan clearing, on ridge at 2250 feet altitude, north of Mount Halcon, Mindoro, Nov. 8-12, 1906, one of the Swiftlets was often seen (see specimens for identification).

Between Alag River (Camp No. 2) and ridge at 2250 feet (Camp No. 3), Mindoro, Nov. 8, 1906.

Abundant of a clearing or "caingin" of the Mangyanes, extending from 3000 to 3300 feet altitude, on a spur of Mount Halcon, Mindoro, Nov. 12 and 13, 1906. (See specimen No. 14455 for identification.)

Swiftlets often seen at Camp No. 5, altitude 4500 feet, on a spur of Mt. Halcon, Mindoro, Nov. 13-17, 1906; also thence to the summit of Mount Halcon, Nov. 17-26, 1906.

When Messrs. Merrill and Hutchinson were on the main ridge of Mount Halcon, chopping a trail towards the main peak of Halcon, on, Nov. 19, 1906, they found the weather partially clear with occasional moments of sunshine; then they flushed a "medium-sized swift" from the heather, where it seemed to have a nest, as it continually flew at them in great perturbation. I had the same experience 2 days later, but found no nest.

(Sheet ~~III~~ 7)

Collocalia linchi group.

Abundant on Mount Santo Tomas, Benguet Province, Luzon, December 9 and 10, 1905.

Mendo Road, Benguet Province, Luzon, Dec. 13, 1905.

Zigzag Hill, " " " " 13, " .

Bued River Canyon, " " " " [illegible]

Camp Roseman, Island of Guimaras, December [illegible], 1905.

C. linchi (No. 15419). Igorot name: Pee-ping'-oh. They do not distinguish this from C. whiteheadi. (Occasional in the caves and abundant in the pines of northern Benguet, Luzon, July 20 to August 3, 1907.)

Twin Peaks, Bued River Canyon, Luzon, December 23, 1906. On the Benguet Wagon Road I found a few below Colgans and in abundance on the Zigzag, above Colgans, Dec. 24, 1906. Same species collected here a year ago.

Swiftlets like No. 14655 were abundant from Twin Peaks to the summit of Mount Santo Tomas (altitude 7 feet), Benguet Province, Luzon, December 24, 1906, to January 4, 1907. It utters a single low note.

Common on the Nagillan Trail, above Sablan, Luzon, ~~March~~ May 19, 1907 (C. marginata and C. linchi).

Swiftlets of ~~some~~ one kind were common at Pili Hot Springs, near Sibi, southeastern Luzon, June 3, 1905.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1905.

217, a. Chaetura gigantea (Temminck).
Giant Swift.

Only seen once, at Paulan (1800 feet altitude), Mindanao, P. I., (the day I shot 3 Chaetura fuciphagus) 1903; a single bird. It passed close to me in open country. I don't know if it was Chaetura celebensis as I did not see the white spots.

Can seen between Sibi and Pili Hot Springs, southeastern Luzon, June 13, 1905.

(Sheet 1.)

Lichmera [illegible] Lessonii.

[illegible]

White-[illegible]

Lichmera Lessonii Lesson, Ann. Sc., 1878, p. 44 [illegible]

(Zamboanga, W. Mindanao).

One large flock at Pantar, on the day when some [illegible]

~~mirdanensis~~
~~albigularis~~
~~magnirostris~~

146-a (51-M)

Put this with "General Notes"

Note on Two Specimens of *Chaetura cilebensis* (Sclater).

The United States National Museum has recently received the ~~fourth and~~ fifth and sixth known specimens of the great Celebesian Swift from Dr. Daniel S. Beebe, a ~~lumber merchant of Isabella, Basilan~~ member of the Philippine Scientific Association, who is engaged in the lumbering business, at Isabella, Basilan Island, P. I.

[Cut this out: In the British Museum Catalogue, Vol. XVI, 1892, page 476, Hartert states that "the only known specimens xxx [from Menado, Celebes] are preserved in the Leyden Museum."]

This, one of the largest and handsomest Swifts known, was described by Sclater (P. Z. S., 1865, p. 608) from two specimens from Manado, ~~Menado~~, N. Celebes; After thirty years it was ~~again~~ recorded from the Philippine island of Negros by Mr. W. Eagle Clarke; and, in March, 1895, a third Celebesian specimen was obtained by Messrs. P. and F. Sarasin, from Tomohon.

The two ~~sps~~ skins sent by Dr. Beebe had been well prepared by Senor Ramon de Larracochea, of Isabella, Basilan, and reached U. S. museum

(Sheet III)

in excellent condition. They are doubtless adult males, as they exceed in size ~~many of the~~ ~~the~~ measurements of Celebesian specimens; and both have two white spots on the sides of the forehead. The female figured in Meyer and Wiglesworth (Birds of the Celebes, pl. XII) has these spots reddish brown. This species has the upper tail-coverts greatly enlarged and with thickened shafts. The spinous shafts of the rectrices do not extend so far beyond the webs as in ~~Chaetura~~ Cypseloides fanleai (Jouanneck).

From the skins (Nos. 192474—5, U. S. National Museum) I have taken the following measurements:

Length, ~~25~~ 240, 255; wing, 215, 215; tail, 75, 75; bill from frontal feathers (chord), 8.5, 9.6; bill from anterior border of nostril, 6.1, 7.1; tarsus, 19, 20; middle toe with its claw, 22.5, 22.5

Adults from Celebes measure: total length, nearly 229 mm, wing 203, tail 71, tarsus 16.5."

"A specimen in the Sarasin Collection marked '♀ juv.' (but we cannot see any signs of immaturity), measures: "wing 208 mm, tail 63, tarsus 16, nostril ~~[illegible]~~ c. 6. (Meyer and Wiglesworth.)"

~~(Chaetura zonaris (Shaw) and C. semicollaris (Sauss.) slightly~~

~~Two species of Swifts of the genus, exceed the dimensions of these two specimens, from Basilan~~

Two ~~Swifts~~ American Swifts ~~Chaetura~~ Hemiprocne zonaris (Shaw) and ~~C.~~ H. semicollaris (Sauss.) — slightly exceed the dimensions of these Basilan specimens.

146—c (Sheet I.)

Chaetura celebensis (Sclater).

Celebes Swift.

Mr. Richard C. McGregor, showed me specimens of this Swift, taken in the Philippine Islands, in the collection of birds belonging to the Bureau of Government Laboratories at Manila, in August, 1905. This is the form he named Chaetura dubia McGregor, of which I afterwards collected one specimen on Mount Halcon, Mindoro. Compare this with the skins of Chaetura celebensis from Basilan Island, in the U.S. National Museum.

(Sheet I.)

Chaetura dubia McGregor.

A large flock, several hundreds, at the Mangyan clearing between the Benibi and Alag Rivers, Mindoro, November 3, 1906.

At Camp No. 3, at Mangyan clearing on ridge, 2250 feet altitude, north of Mount Halcon, Mindoro, Nov. 8–12, 1906. flights occurred, near evening, when hundreds darted past.

Ridge between Camps No. 2 and No. 3, Mindoro, November 8, 1906.

Abundant between camps 4 and 5, ~~in~~ flying over a large clearing of the Mangyan tribe, extending from 3000 to 3300 feet altitude, on a spur of Mt. Halcon, Mindoro, Nov. 12 and 13, 1906.

Some were flying over Camp No. 5, altitude 4500 feet, on a spur of Mount Halcon, Mindoro, Nov. 13–17, 1906.

One flew past Camp No. 6, altitude 6300 feet, Mount Halcon, Mindoro, Nov. 19, 1906.

Not seen on the summit of Halcon, as the weather was very windy and rainy.

Several shot on Buena Vista Hill, Camp No , altitude feet, Nov. , 1906, could not be recovered. The only specimen secured was No. 14466 Bad, Camp No. 3, altitude 2250 feet, Nov. 10, 1906.

Pentecopon ardens (Hemmimack).

~~227. Harpacte ardens (Hemmimack).~~

Philippine Dragon.

Sah-goo'-soak (Moros of Lake Lanao).

Tee-too'-tee, Bagobos of Mount Apo, Mindanao.

Common at Paniau, 1907 ft. alt., Mind., Aug. & Sept., 1903.

Many females, but only one male seen.

Saw a specimen from Zamboanga in Manila.

Specimen in Jesuit Museum, Manila, labelled Zamboanga, Mindanao.

Isabella to Camp No. 1, interior of Basilan Island, Feb. 13, 1906.

One was found, February 15, 1906, eaten in the trail between Camp No. 2 and Camp No. 3 (at Tipu-Tipu), in the interior of Basilan Island

Camp No. 8 to Camp No. 9 (Mussuwa), north Basilan, Feb. 21, 1906.

Noted, July 10, 1904, at 5275 feet on Mt. Apo trail, Mindanao.

(Sheet I.)

Kaa-uh-doo'-deen, Bagobos of Mount Apo, Mindanao.

~~Cuculus~~ Cacomantis merulinus insolitus.

Rufous-bellied Plaintive Cuckoo.

Lake Mainit, northern Mindanao, April 24, 1904.

Baganga to Christian Ader's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

From Ader's plantation west to the River, eastern Mindanao, April 27, 1904.

Agusan River, near Lake Linao, Mindanao, May 4, 1904.

Twin Peaks, Bued River, Luzon, Nov. 30 and Dec. 1, 1905.

Heard at dusk, near Paoay Lake, January 27, 1907; the first noted by me in Ilocos Norte Province, Luzon.

Paoay Lake, February 5, 1907.

Heard after dark, at Twin Peaks, Bued River, Luzon, Dec. 23, 1906.

Heard again, at Twin Peaks, Luzon, in early morn, Dec. 24, 1906.

Heard at Twin Peaks, Dec. 23 and 24, 1906, and near the summit of Mount Santo Tomas, January 1, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Talace side up to the upper timber line, Albay Province, Luzon, June 4 and 5, 1907.

A few heard and seen at Camp No. 7, altitude 6300 feet, Mt. Halcon, Mindoro, Nov. 17-22, 1906; and one shot (No. 14504 ♂ ad.) at 6650 feet, above Camp No. 6.

Mangyan house, altitude 3000 feet, Mt. Halcon, Mindoro, Nov. 26 to 28, 1906.

(Sheet II.)

Cacomantis merulinus (Scopoli).

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.

Heard, at evening, at Sandakan, Borneo, October 14, 1906.

Melville, Balabak Island, October 16, 1906.

Five specimens from Mount Malindang, Mindanao are all of the dark phase. Both light and dark birds are in the Bureau of Science collection from the northern Philippine Islands.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Parang Parang, southern Mindanao, March 14, 1906.

Beside my camp on the summit of Mount Bliss a long-tailed Bird, supposed to be this species built a nest in a tuft of large leaves of the epiphytic Medinillus growing upon an oak-tree overhanging a steep ravine and about 30 feet above the ground. The nest and eggs were preserved. The bird was so shy and so seldom visited the nest that I never was certain of the identification. The eggs were shaped like cuckoo eggs and colored like spotted eggs of thrushes. On the day, I left the camp (,1906), but 2 eggs had been laid. I think both were broken; but the nest is preserved.

[illegible] (Sheet 2.)

Philippine Kite.

Larger Cuckoo.

Common at Zamboanga, Jan. to April 9, 1906.
Noted at Davao, southern Mindanao, July 15 to 20, 1904.
Noted between Malabang and Camp Vicains, Mind., March 31, 1906.
There is a skin of one of these larger Cuckoos, among those which I forwarded for Mr. M. L. Robb.
In a deep ravine behind the Moro village of Mali=-yam, southern Mindanao, October 25, 1903, I saw and heard birds supposed to be of this species, whose note was Cuck'-oo, cuck'-oo.
At evening these birds were crying loudly, at Olan, southern Mindanao, October 26, 1903.
Soon after leaving the Buluan River, on the trail to Simpitan, Mindanao, May 23, 1904, many of these birds were seen; and, in our camp on the Malala River, they were heard until bedtime. They were also quite numerous on the Numbawata and Dim-my-gall-ee rivers, as well as at Simpton.
Descending the Buluan River, May 27, 1904, it was noted between Buluan and Pandog.
Noted at Surigao, N.E. Mindanao, April 21, 1904.
Malanipa Id., off S. Mindanao, P. I., April 1, 1906.

239. Eudynamis mindanensis (Linnaeus).
Philippine Koel. Black Cuckoo.
Oboo-oboo is the Manobo name.
Bajao (Bah-how') is the Moro name at Zamboanga.
Cu-ow Filipinos of Zamboanga.

October 26, 1903, I heard a number of these cuckoos crying in the forest at Dipe, southern Mindanao. They began at sunset and continued until dark.

One shot, but not recovered, at Dupulog, northern Mindanao, P.I., February 14, 1904.

At evening, March 12, 1904, this bird was crying loudly in the thickets bordering the Libungan River, east of Cotabato, southern Mindanao; also noted from the Libungan River to Seranaya, March 13, 1904.

Barak and Seranaya, in the Rio Grande Valley, Mindanao, March 8-12, 1904. Seriaus at evening.

The strange cry of this Koel was frequently heard ~~between~~ from Ade's plantation west to the River, eastern Mindanao, April 27, 1904.

Heard at Tingali, on the lower Baoaca River, in the interior of Mindanao, May 4 and 5, 1904. Seen from Tingali on the Baoaca River to Compostela on the Agusan River, May 5, 1904; abundant on the upper Agusan, below Compostela, May 5, 1904.

Eudynamis mindanensis (Linnæus).

Compostela to Pilar, Agusan River, Mindanao, May 5, 1904. Its voice was continually heard through the Agusan Valley from Compostela to Butuan. Its long shrieks were most frequent after sundown. Many seen, May 6, 1904, between Pilar and Patria.

Lake Linao to Talacogon, Agusan Valley, Mindanao, May [illegible]

Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11, 1904.

Agusan River below Butuan, Mindanao, May [illegible]

Abundant on the lower slope of Mount Mayon, on the Legaspi side, up to 1500 feet altitude, Albay Province, Luzon, March 28, 1907.

One male above my camp on the Nagilliran River, Luzon, ~~March~~ May 19, 1907.

Cusiguran, east coast of Luzon, June [illegible] 1907.

Baler, east coast of Luzon, [illegible]

Pili Hot Springs, near Pili, southeastern Luzon, June 3, [illegible]

Base of Mount Mayon, near Tabaco, Albay Province, Luzon, June 4 and 5, 1907.

Abundant on Huga Island, P. I., May 29 and 30, 1907. One specimen taken. Finding typical E. mindanensis with E. fratler is proof that the two are distinct.

Eudynamis mindanensis (Linnaeus).

Abundant on Lake Naujan, eastern Mindoro, March 25, 1907; very noisy at night.

Calapan, Mindoro, October 31, 1906.

Lower Subaan River, Mindoro, Nov. 2, 1906.

Alag River, Mindoro, Nov. 5–8, 1906.

Specimens taken, in Mindoro, are: 14551, Subaan, Dec 6; and 14590 and 14591, Calapan, Dec. 9, 1906.

Numerous on Palmas Island, January 21, 1906. Whenever the guns were fired the Koels would scream. I collected a female, No. 13887. Stomach filled with green fruit, only. Iris red. Testicles functionally enlarged. Notes the same as those of the ~~Mindanao Koels~~. Koels on Mindanao Island.

Also abundant on Palmas Island, October 7, 1906, when four specimens were collected. One shot by General Wood, one by Dr. Paul C. Freer, and two by Captain James K. Thompson, U.S. Army. As usual, whenever a shot was fired, it became the signal for every koel in the vicinity to screech mightily.

Sarangani Island, off southern Mindanao, ~~Jan~~ October 8, 1906.

Balut Island, Sarangani group, Jan. 23 and Oct. 8, 1906.

Isabella, Basilan Island, January 26 and 27, 1906.

Camp No. 1 to Camp No. 2, west of Isabella, Basilan Is., Jan. 23, 1906.

(Sheet V.)

Eudynamis mindanensis (Linnæus).

Camp No. 3 to Camp No. 4, Basilan Island, Jan. 30, 1906.

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906.

Between Tipo Tipo and Camp No. 8, Basilan Id., Feb. 3, 1906

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Malamani Island, off Basilan Island, Feb. 13, 1906.

Jumahobang River, south Basilan, February 16, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.

Lower Catubig River, north Samar, October 1, 1906.

Cajoagan Island, off north Samar, October 2, 1906, when Nos. 14337 and 14338, males, were collected. Very numerous and noisy.

Bozongan, east Samar, October 3, 1906.

Landing, east Samar, October 3, 1906.

Bucas Island, off northeast Mindanao, October 4, 1906.

Lower Cateel River, east Mindanao, October 5, 1906.

October 6, 1906, we saw one mounted by Mr. Reyes at Caraga, where it was shot. E. Mindanao.

Manay, east Mindanao, October 6, 1906

Many noted on Loran Id., off Ubian Id., October 12, 1906.

Koels were abundant on Sumindao Island (off Ditankli Island), Oct. 13, 1906; but I got none.

(Sheet VI.)

Eudynamis mindanensis (Linnaeus).

Koels were abundant on Cagayan Sulu Island, Sulu Sea, October 15, 1906, when I shot No. 14433, ♀ ad. So far as I could see, it was a female in spite of mostly black plumage.

Compare No. 14433 with Eudynamis honorata Linnaeus, which is recorded from Palawan Island.

I preserved specimen No. 14445, ♂ ad., shot on Lumbucan Island, October 16, 1906, by Captain Holstead Dorey. This specimen should be compared.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Lower Rio Grande, southern Mindanao, March 15, 1906.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

~~At the residence of Governor Miller, at Puerto Prin=cesa, east Palawan, September~~

Marigina Valley, Rizal Province, Luzon, Sept. 17, 1906.

Antipolo, Rizal Province, Luzon, September 21, 1906.

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Common at Tagulaya, on the west shore of the Gulf of Davao, June 14, 1904

Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

Eudynamis mindanensis (Linnæus).

Camp Overton, northern Mindanao, July 9, 1906.

(Sheet 1.)

Euthynnus lineatus (Linnæus).

At the residence of Governor Miller, at Puerto-Princesa, east coast of Palawan, September 11, 1906. Two specimens collected by Sergeant Emanuel Newman ~~Arquelaine~~ of the Hospital Corps, U.S. Army.

Eudynamis frater McGregor. (Sheet 1.)

Eudynamis frater McGregor, Bull. Philippine Mus., No. 4, 1904, p. 21.

On Luzon Island, May 29 and 30, 1907, I found it abundant and noisy, and procured two males.

[illegible]

Centropus sinensis [illegible].
Cagayan Sulu Rainerow.

This seemed to be ~~the~~ much largest species of Centropus seen by me in the Philippine Islands.

On the island of Cagayan Sulu, in the Sulu Sea, February 25, 1904, I noted: "A very large red-brown and black unspotted Rainerow was often ~~seen~~ heard and occasionally seen. I shot one but could not reach it." These birds were seen on the tops of trees and bushes on the hills and often ~~among~~ in the tall cocoanut trees. Captain Langhorne, U.S. Army, who crossed the island twice ~~in a north and south direction~~ on Feb. 25, 1904, found them ~~on both~~ everywhere, especially on summits in thickets.

Seen near Santo Domingo de Basco, Batan Island, May 27, 1907.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

(Sheet I.)

Centropus mindorensis (Steere).

Some were seen on the Naujan River, eastern Min=
=doro, March 25, 1907.
Lower Subaan River, Mindoro, Nov. 2, 1906.
Benibi River, Mindoro, Nov. 3 and 4, 1906.
Alag River, Mindoro, Nov. 5–8, 1906.
The only specimen taken: No. 14521 ♀ ad, Camp No.
altitude, feet, at junction of and Alag
Rivers, December 2, 1906.

(Sheet I.)

Centropus carpenteri Mearns.

Bolan Island Coucal.

Centropus carpenteri Mearns, Philippine Journal of Science, Vol. II, October, 1907, p. 356.

Named for Mr. William Dorr Carpenter who shot the type specimen.

(Sheet VII.)

Ceritrophus viridis (Scopoli).

Sea level, at Tagulaya, up to 1030 feet on trail to Mount Apo, southern Mindanao, June 15, 1904.
Halicul Island off Samal Island in the Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.
Camp Overton, northern Mindanao, July 9, 1906.
Cebu, Cebu Island, July 10, 1906.
Dulag, east coast of Leyte, July 25, 1906.

242. Centropus viridis (Deopoli).
Philippine Paucal ; Rainerow.
Koo'-how (Moros of Zamboanga).

Noted at Manay, southeastern Mindanao, October 23, 1903.
" " Parang, southern " " 18, " .
This species was common along the Rio Grande up to Lake Liguasan, Mindanao, October 19, 1903.
Noted at Davao, southern Mindanao, October 24, 1903.
Abundant in the cogonals about the head of Sarangani Bay, in the vicinity of Makar and Bula, southern Mindanao, October 26, 1903.
At Zamboanga, Mindanao, P. I., December 2, 1903.
Noted at Cabasaran, on the Cabasaran River, Jan. 30, 1904.
Also at Bulwan, on the mainland of southern Mindanao, January 31, 1904; also at the place of Datto Dalis Hasin, six miles inland and two miles from the river, Jan. 31, 1904.
Noted on the island of Banga (Port Banga), off southern Mindanao, February 1, 1904
Noted at Dipulog, northern Mindanao, P. I., February 14, 1904.
" as "abrin Lapit" " Dubungan, " " "
Noted at Iligan, northern Mindanao, February 15, 1904.
Noted at Malabang, southern Mindanao, March 31, 1904.

(Sheet II.)

~~Genus Coccyzus Cuvier.~~

242. Centropus viridis (Scopoli).

Noted at the Subanon villages of Lindangan and Mucas, on Dindangan Bay, northern Mindanao, P. I., February 16, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Abundant at Cottabato, Rio Grande Valley, Mindanao, March 3 to 5, 1904.

One were seen at Pantar on

Noted at Malabang, Mindanao, [illegible]

Noted at Isabella, Island of Basilan, January 19, 1904.

Noted as abundant at Malabang, Mindanao, Oct. 7-9, 1903.

Some were seen in the grassy bogs floating on Lake Liguasan, Mindanao, May 17, 1904. May 19: "A few live in the grass of Lake Lanao."

Abundant in the grass bordering the Buluan River, which connects lakes Buluan and Liguasan, Mindanao, May 20 to 23, 1904; also around Lake Buluan, May 22, 1904.

Noted on the Malala River and at Simpitan, near Lake Buluan, May 23 to 26, 1904.

Descending the Buluan River, May 27, 1904, it was noted, between Buluan and Pandog.

This cuckoo was common along the Rio Grande from Lake Liguasan to near the rivermouth, May 28 and 29, 1904.

Centropus viridis (Scopoli).
Green Philippine Coucal.

Numerous at Surigao, northeastern Mindanao, April 20 and 21, 1904.

Noted at Bacuag, northeastern Mindanao, April 21, 1904.

Abundant at Dinagat, on the Island of Dinagat, April 21, 1904. One specimen (No. 13347) was taken there.

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

Abundant at Zamboanga, Jan. to April 9, 1906.

Ayala, Mindanao, P. I., April 24, 1906.

Iligan, Iligan Valley, east of Cotabato, March 12, 1904.

Pikungay, Ruiz to Daraganga, Mindanao, March 13, 1904.

Piangi to Barak, Rio Grande Valley, Mindanao, March 9-11, 1904.

Abundant on the Tubay River and Lake Mainit, northeastern Mindanao, April 22-24, 1904.

Baganga to Christian Ede's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Abundant at Tingali, on the lower Bacoca River, in the interior of Mindanao, May 4 and 5, 1904; and thence to Compostela, on the Agusan River, May 5, 1904.

On the Agusan River, Mindanao, May 6, 1904, between the ~~towns~~ villages of Talar and Valiva, many were heard, and one pair crossed the river close to our boat; one shot at Valiva; Valiva to Patrocino, May 7, 1904.

Lanuelo to San Lino, Agusan Valley, Mindanao, May [illegible]

Centropus viridis (Scopoli).

Lake Linao to Talacogon, Agusan Valley, Mindanao, May [illegible]
Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11, 19[illegible]
Starting down the river from Talacogon at 4:45 a.m., cuckoos and Chinese orioles were the first bird voices heard.
Agusan River below Butuan, Mindanao, May [illegible]
Camp Rosemon, Island of Guimaras, [illegible]
Trinidad Barrio to Laoag, Ilocos Norte, Luzon, January [illegible]
Laoag River, below Laoag, January 16, 1907.
Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.
Common from Dingras to Badsan, Ilocos Norte Province, Luzon, January 17, 1907.
Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 19[illegible]
In the Laoag River Valley, a short distance below Laoag, Jan. 19, 1907, in a tamarind grove, I shot an albino and a normally-plumaged one, and soon after saw another white one. Abundant in the Laoag Valley, often in [illegible]
Common Laoag Valley, below Laoag, Ilocos Norte, Luzon, Jan. 20-22, 1907.
" , " to Vintar Lake, do " 23-24 and [illegible]
" , " " Paoay " , do " [illegible]
" , " " Nagpartian, do Febr. 15, 1907.
Burdett Manganese Mine, N.W. extremity of Luzon, February 19, 1907.
Abundant, sometimes in edge of forest, at Nagpartian, Ilocos Norte Province, Luzon, February 15 to March 9, 1907.
Nagpartian to Laoag, March 9, 1907.

Centropus viridis (Seopoli).

Abundant on the base of Mount Mayon, Legaspi side, up to 1500 feet altitude, Albay Province, Luzon, March 28, 1907.

Sublibang to Camp Wallace, on the Magillian Trail, Luzon, ~~March~~ May 19 and 20, 1907.

Commonest Camp Wallace, La Union Province, Luzon, May 20–25, 1907.

Cusiguran, east coast of Luzon, June 1, 1907.

Baler, east coast of Luzon, June 2, 1907.

Pili Hot Springs, near Sibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Concals were abundant on Fuga Island, May 29 and 30, 1907. See specimens collected for identification as both this and C. javanicus may be represented.

On trail from Naujan to the Naujan River, eastern Mindoro, March 25, 1907.

Balut Island, Darangani group, October 2, 1906.

Camp No. 1 to Camp No. 2, west of Isabella, Basilan Id., January 28, 1906.

Camp No. 8 to La Milan, north Basilan, February 11, 1906.

Malamani Island, off Basilan Island, February 13, 1906.

Isabella to Camp No. 1, interior of Basilan, February 13, 1906.

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

over

(Sheet VI.)

Centropus viridis (Scopoli).

Camp No. 5 to Camp No. 6, south Basilan, Feb. 18, 1906.
Malusa, west Basilan, February 19, 1906.
Camp No. 7 to Camp No. 8, Basilan Island, Feb. 20, 1906.
Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.
Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.
Burengo, Catubig River, north Samar, October 1, 1906.
Borongan, east Samar, October 3, 1906.
Lower Cateel River, east Mindanao, October 5, 1906.
Sulu Island, from Jolo to Bud Dajo Peak, Oct. 11, 1906.
Zamboanga, Mindanao, January 12, 1906.
Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Diet Lake, March 1 and 2, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.
Ayala, western Mindanao, August 27, 1906.
Camp Connell, west coast of Samar Island, September 5, 1906.
Many Concals, apparently this species were seen on Cuyo Island, Sulu Sea, September 10, 1906.
Mariquina Valley, Rizal Province, Luzon, Sept. 17, 1906.
Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.
Davao, southern Mindanao, June 13, 1904.
Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.

150, 151, or 152.

(Sheet 1.)

Centropus [illegible]

[illegible]

[illegible] (Dumont).

On November 13, 1903, the troops of General Wood's command crossed the island of Sulu from Dietz Lake to the fort of the Moro Panglima, Hassan, on the opposite side of the island, driving the army of hostile Moros before them. During this movement Cuckoos of this genus were continually being flushed, and were flying over the grass—and vine-tops in every direction. Three species—Centropus sinensis, C. viridis, and C. javanicus—had been detected on the island; and I think I saw all of them the day following. Only one species was collected on that expedition [No. 13142], and that was C. sinensis. Rainerows were noted as numerous on our route from Hassan's residence to Upa's place, thence to Crater Mountain. At Upa's place, November 14, 1903, I noted: "Shot a new kind of Rainerow which was not recovered in the vine-tangled grass." This was a large yellowish bird, much spotted, with [illegible]. The Rainerow about Crater Mountain was noted as "different from that of Pantar: Many on Mt. Sulieman, November 19 and 20, 1903; Tagibi, November 20 and 21, 1903. Common around Jolo, Sulu, November 21–26, 1903; brown (young?) and black.

150, 151, or 152. (Sheet II.)

Centropus sinensis [illegible].

[illegible]

A Rainerow (No. 13356 ♂ad.) was shot on the island of Sulu, P.I., between Datto Upa's residence and his market at Bual. Many were seen, including, probably another species.

In a list of the birds found on the island of Siassi, P.I., Captain T. L. Smith mentions "two birds that live in the grass and are known to the natives [Moros] by the names of Bangau and Sambal, respectfully," which may probably belong to the genus Centropus — perhaps sinensis + javanicus, the species most common on Sulu Island.

Rainerows were numerous about Camp Vicars (altitude about 2900 feet) September 28 and 29, 1903. They were probably javanicus but possibly viridis; the same were again seen in the cogon grass on the road from Camp Vicars towards Matalung Falls, Sept 29, 1903.

One species of Centropus was abundant at Lake Butig, south of Lake Lanao, Mindanao, Oct. 5 + 6, 1903.

A Centropus was noted at Camp Hotsenberg, Luzon, Nov. 28, 1905.

The Conical of Siassi Island, October 12, 1906, is specimen No. 14405, ♂ad., which was a dipositing; numerous Many seen on Doran Id. (off Nibiani Island), October 12, 1906. Species the same as No. 14405 from Siassi Island.

Centropus javanicus (Lath.).

now; Javan Coucal or Crow-Pheasant

Sah-goo'-soke (Moro of Lake Lanao). No. 12928 Coll.

Abundant from Pantar to Marahui, Mindanao, September 27, 1908.
North side of Lake Lanao, Mindanao, November 3 [illegible]
Abundant at Pantar and Marahui, [illegible]
Noted at Camp Vicars (3000 ft. altitude), Mindanao, March [illegible]
Noted " " " " April [illegible]
Noted from Camp Vicars to Sumir, on Lake Lanao, April [illegible]
In the cogonal meadows between Sumir, on Lake Lanao, and Camp Vicars, a few were noted ~~[illegible]~~ April [illegible]
I got its eggs at Pantar.

In the cogonals surrounding Camp Vicars were some on April 11, 1904; and others were noted between there and Malaitig Hacienda the same day.

A species apparently this was common around the city of Manila in August, 1905.

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

A coucal listed as Centropus javanicus was noted along the Manila and Dagupan Railroad, between Manila and Camp Gregg, Luzon, July 29 and 30, 1905.

Abundant at Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

Quite common about Baguio, Benguet, Luzon, December 1 to 12, 1905.

(Sheet II.)

Centropus javanicus (Dumont).

Trinidad, 4500 feet, Benguet Province, Luzon, December 3, 1905.

Mount Santo Tomas, up to 6000 feet, Luzon, December 10, 1905.

Meade Road, Benguet Province, Luzon, December [illegible], 1905.

? Dec specimen shot at Lintan Lake, Ilocos Norte, Luzon, Jan. 24, 1907.

Camp John Hay military reserve and reservation at Baguio, Benguet Province, Luzon, Dec. 14, 1906 to January [illegible], 1907.

Baguio to Dalaoan, on the Nagillian Trail, Luzon, ~~March~~ May 19, 1907.

Conculs were abundant on Fuga Island, P. I., May 29 and 30, 1907. See specimens for identification.

Tipo Tipo, interior of Basilan Island, February 3, 1906.

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Tipu Tipu, interior of Basilan Island, February 15, 1906.

Between Tipu Tipu and south coast of Basilan Id., Feb. [illegible], 1906.

Mamuk Manka Island, January 6, 1906.

Sulu Island, from Jolo to Maimbung, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Sah-gook'-sook, Bagobos of Mount Apo, Mindanao.

244. Centropus melanops Lesson.

Black-headed Coucal.

Mr. Maynard L. Robb collected this bird at Zamboanga, and got specimens on Basilan Island and at Tooncahling, at 2000 feet altitude on Mount Apo, Mindanao.

Near Isabella, Basilan Island, January 27, 1906.

One shot near Camp No. 2, west of Isabella, Basilan Island, January 28, 1906.

Camp No. 5, to the Cumalarang River, interior of Basilan Island, February 1, 1906.

Camp No. 6 to Camp No. 7 (near Sipo-Sipo), in the interior of Basilan Island, February 2, 1906.

Between Sipo-Sipo and Camp No. 8, Basilan Id., Feb. 3, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.

Camp No. 2 to Camp No. 3 (at Sipo Sipo), Basilan Island, Feb. 15, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Specimens Nos. 13505, ♂ad., and 13506, ♂ad., were collected above Tooncahling, at an altitude of 2000 feet on the base of Mount Apo, Mindanao, June 15, 1904. They were shot in bamboo 3350 to 3500 feet on Mt. Apo, Mindanao, June 17, 1904.

269. Xantholaema haematocephala (P. L. S. Müller).
Crimson-breasted Barbet or Coppersmith.
Jaá-sung (Moros of Zamboanga). Ná-ná-ka; a boy of Zamboanga gave me this name, and said he had seen this bird on the island of Basilan.

The entire record of my only specimen seen is at page 56 of my field register of specimens collected. Male shot at target range near Zamboanga, April, 1906. From a tree-top its call resembled that of the Bagueu Pigeon — a single oft repeated note.

Between Deranaya Marsh and Labas, east of Cotabato, southern Mindanao, March 12 and 13, 1904.

Burdett Manganese Mine, N.W. extremity of Luzon, Feb. 19, 1907.

In the region surrounding Naguilian, Ilocos Norte Province, Luzon, from February 15 to March 9, 1907, this coppersmith was more abundant than I have found it elsewhere. Its "pounding notes are continually heard in the town." "At Naguilian, during a period of heavy winds, these birds were scarcely in evidence; but, when calm periods arrived, its call was heard from common tree tops all about the village. The bird is restless, and every cessation of its coppersmithing usually indicates a change of perch; but the bird is not shy, preferring openings with a few trees to the dense forest."

Xantholaema hæmatocephalum (P. L. S. Müller).

"Dozens heard February 26, 1907 at Nagpartian."

"This comical little bird, seemingly handicapped by a prodigious head and beak and a little bobbed tail, clothed in a brilliant uniform of red, green, and gold, is really abundant in Nagpartian. It likes a prominent rostrum on some tall tree bare of leaves, whence it beats its metallic call which has given the bird its name of "coppersmith." Usually but one is seen on a tree; but its mate may be heard pounding away on some neighboring treetop. Often the two join, and sit so close together that both fall to one shot of the collector's gun. Though several pairs are commonly heard in the town at one moment, I have not seen more than two together except on March 4, 1907, when seven were hammering out their notes in a cotton-tree beside the house in which I lived when at Nagpartian."

One at sealevel, near Bojador, Ilocos Norte, Luzon, March 9, 1907.

Cusiguran, east coast of Luzon, June [illegible] 1905.

Very abundant from Nauyan, on the coast, to Lake Nauyan, eastern Mindoro, March 25, 1907, when one was shot.

Chaplain Clemens collected it at Camp Keithley, Mindanao.

? Mamuk Manka Island, January 6, 1906 (heard and seen, but not shot). Perhaps X. roseum.

Xantholaema haematocephalum (P.L.S. Müller).

Three adults (♂, ♀, ♀) and one young in first plumage (♀ juv.), taken at 1100 feet altitude on Mount Malindang, northwestern Mindanao, in June, were compared with 13 adults from Nagpartian, Ilocos Norte Province, Luzon, in February. All of the Mindanao birds differ in having longer and more pointed bills, although the wing measures about 5 millimeters less than in Luzon birds. The Mindanao birds were darker throughout, this being partly due to wear and difference of season, as resident Luzon birds, taken at the same season, were nearly as dark, but always had more gray on the nape and behind the ear-coverts than those from Mindanao, in which these parts are practically black. The three adults from Mindanao were breeding, one female being shot with her young in first plumage. At Nagpartian, the extreme northwest point of Luzon, these barbets may have been migratory, as many as 7 having been seen together on one tree. At times, none were heard for several days together, and then its notes could be heard on all sides.

If resident Philippine birds were separated on the slight characters given above, trouble would always ensue from the mixture of winter migrants — if the species indeed actually does migrate from the westward to the P. I.

(Sheet I.)

272. Dryngipicus validirostris Blyth.

Luzon Pigmy Woodpecker.

One was shot at Marivelis, Bataan, Luzon, P.I.,

Not uncommon in the pine forests surrounding Baguio, Benguet Province, Luzon, Dec. 1-12, 1905. One or more were seen daily. Its cry is a squeaky rattle.

Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Meade Road, Benguet Province, Luzon, December 13, 1905

Burdette Manganese Mine, N.W. point of Luzon, Febr. 19, 1907.

Several pairs and families were seen at Nagpartian, Ilocos Norte Province, Luzon, from February 15 to March 9, 1907, when I found it to the extreme northwest point of Luzon. This was the only woodpecker found at Nagpartian. On March 7, 1907, I found a family of these interesting woodpeckers in the riverbottom at Nagpartian; one, so young that I was able to catch it in my hand, sat for a long time on a stub in the stony creek bed and uttered a squeaky rattle. On February 26th, I saw the old birds flying in and out of a hole near the top of a small tree that grew on an islet in a brook. The opening was 20 feet above the water, and about the size that our downy woodpecker would have made. Young could be heard squeaking within the limb which I refrained from breaking open.

274. Dryobates fulviflagellatus Hargitt.
Mindanao Pygmy Woodpecker.
Bala-bala-tong: [illegible] Illanos.
Scarce at Pantar, Mindanao, in Department of Sulu [illegible]
Total length [illegible] from Malabang to Camp [illegible] (6 to 3000 feet) [illegible]

Seen at Zamboanga, Mindanao, P. I., April 9, 1906.

I noted the absence of this species, as also of all Woodpeckers from Cedeis place to the River, eastern Mindanao, on April 27, 1904.

At Camp No. 3, Basilan Island, January 30, 1906.

Cumalarang River to Camp No. 6, interior of Basilan Island, February 1, 1906.

Camp No. 6 to Camp No. 7 (near Tipo-Tipo), in the interior of Basilan Island, February 2, 1906.

Camp No. 2 to Camp No. 3 (at Tipu-Tipu), Basilan Island, Feb. 15, 1906.

278. Chrysocolaptes lucidus (Scopoli).
Red-backed Golden Woodpecker.
Bah-la-la-took (Moros of Lake Lanao).

One was noted at the town of Santiago, on the Tubay River, northeastern Mindanao, April 24, 1904.
Noted at Davao, southern Mindanao, July 15 to 20, 1904.
[illegible]
Noted at Davao, southern Mindanao; [illegible]
Hammering [illegible]
Noted at ~~and~~ Bung Bung, southern Mindanao, January 30, 1904. Also at Buluan, " " " 31, 1904.
Abundant on the last six miles of the Cabas=
=aran River, southern Mindanao, January 31, 1904.
Noted at Dipulog, northern Mindanao, February 14, 1904.
" " Lubungan, " " "
" " Iligan, " " Febr. 15, 1904.
" " the Sulano village of Mucas, on Lindangan Bay, northern Mindanao, P. I., February 16, 1904.
[illegible]
Noted near Isabella, Basilan, January 19, 1904.
Always abundant around Zamboanga.
Koranaya and Lakas, Libungan Valley, east of Cotabato March 12 and 13, 1904. At the Manobo village of Patrocino, on the Cequsan River, Mindanao, May 7, 1904, I saw one at the entrance of nesting hole in tree.

Chrysocolaptes haematribon (Wagler).

Voong-i (Igorotes of Benguet).

Camp Gregg, Pangasanan, Luzon, July 29 and 30, 1905.

Bued River Canyon, a short distance above Twin Peaks, Luzon, December 1, 1905.

Twin Peaks, Benguet Wagon Road, Luzon, December 14, 1905.

(At Haights, in the central Benguet highlands, it was common in the oak woods. Its usual cry somewhat resembles that of Halcyon gularis; but it utters quite a variety of notes.

One female shot from a pine on the Benguet Road, Camp John Hay, Benguet District, Luzon, [illegible], 190[illegible], at 4700 feet altitude, was the only one seen from Dec. 24, 1906 to January 4, 1907.

Busiguran, east coast of Luzon, June [illegible], 1905.

(Sheet 1.)

Chrysocolaptes rufopunctatus Hargitt.

Noted at Dulag, east coast of Leyte, July 25, 1906.

(Sheet I.)

Chrysocolaptes

July 3, 1904.— Heard a large Woodpecker rapping on tree above Camp Goodfellow, altitude 6000 feet on Mount Apo Mindanao. The first one noted.

Sahm-boo-lat'-ō, Moros of Basilan Is. (Sheet II.)

Chrysocolaptes lucidus (Deopoli).

Near Isabella, Basilan Island, January 26, 1906.

Camp No. 1 to Camp No. 2, west of Isabella, Basilan Island, January 28, 1906

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906

At Camp No. 3, Basilan Island, January 30, 1906.

Cumalasang River to Camp No. 6, interior of Basilan Island, February 1, 1906.

Camp No. 6 to Camp No. 7 (near Tipo Tipo), in the interior of Basilan Island, February 2, 1906

Tipo Tipo to Camp No. 8, interior of Basilan Island, Feb. 3, 1906

Isabella to Camp No. 1, interior of Basilan Island, Feb. 13, 1906

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906

Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906

Buli Buli River to Camp No. 5, south Basilan, February 17, 1906, when I collected specimen No. 13957.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Malusa, west Mindoro, February 19, 1906.

Camp No. 7 to Camp No. 8, Basilan Island, Feb. 20, 1906

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.

Common, one shot, on the lower Coleel River, east Mindanao, October 5, 1906.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Ayala, western Mindanao, August 27, 1906.

281. Microstictus fuliginosus Tweeddale.
Mindanao Fuliginous [illegible].
Bah-la-la-look (Moros of Lake Lanao).

[illegible] of Pantar, Mindanao, [illegible] August and September, 1903. In heavy [illegible]. One adult of [illegible], Mindanao, Sept. 29, 1903. Noted between Malabang and Camp Vicars, Mindanao, [illegible]

A pair was seen near the base of Santo Tomas Peak, Benguet, Luzon, December 10, 1905. They were in oaks at nearly 6000 feet altitude and afterwards flew into pine trees.

2803. Thripornax javensis (Horsfield).

Great Black-backed Woodpecker.

Bah-la-la-tink (Moros of Lake Lanao)

Abundant in vicinity of Bamboanga, Mindanao Jan. to April, 1906.

[illegible]

Not uncommon at Pantar, Mindanao, during [illegible]

When crossing the island of Sulu, P. I., on the trail from Nipa's cotta to Tarakan Mountain, November 15, 1903, this large Woodpecker made the tall trees resound. In a camp on the stream near Panglima Hassan's cotta, at the foot of Crater Mountain, occupied from November 15 to 18, 1903, the forest trees are very tall; and in them the loud drumming of this Woodpecker could always be heard.

Two were seen on the last six miles of the Cabosaran River, southern Mindanao, January 31, 1904.

Noted, February 16, 1904, in the lowest portion of two rivers that enter Sarangani Bay, northern Mindanao, at the Subano village of Mucas.

One was seen at Camp Marahui, central Mindanao, P. I., September 20, 1903.

Captain Frank R. McCoy noted this bird in the mountains Dalwan Davao and the headwaters of the Alip River, in southern Mindanao, early in June, 1904. I saw none about Mt. Apo.

Thripomax javensis (Horsfield).

Head of Cabel River, East Coast Range of Mindanao, May 5.

Agusan River at Jativa, Mindanao, May 6, 1904.

" " from Jativa to Patrocinio, Mindanao, May 7, 1904.

" " at Varicella, (Agusan River, Mindanao,) nesting in a large dead tree in the village, May 7 and 8, 1904.

Agusan River below Butuan, Mindanao, May 11, 1904.

On December 10, 1905, I saw a pair at the base of Santo Tomas Peak, at about 5500 feet altitude. During flight they produced a loud, whirring sound. The trees (pines) near the summit of Mount Santo Tomas ~~(pines~~ were as deeply hatched as those operated upon by our American pileated woodpecker. Cahl-lll'-lah (Igorotes of Benguet). Cal-lee'-lah.

Mr. Guy Fay Haight says it is not a common about his residence in the highlands of northern Benguet, Luzon; but I saw ~~it~~ only two from July 20 to August 3, 1907. It was quite shy and secretive, its presence being revealed more usually by its loud rapping than by its flight or cries. In general it resembles our pileated woodpecker; and it makes similar coarse hatchings in the trees.

(Sheet III.)

Thriponax javensis (Horsfield)

October 5, 1906, I shot one as it was crossing the broad Cateel River, eastern Mindanao. It fell in mid-stream.

General Wood shot one at Manay, east Mindanao, October 6, 1906.

(Sheet 5.)

Thriponax multilunatus McGregor.

Near Isabella, Basilan Island, January 27, 190[illegible]
Camp No. 2 to Camp No. 3, Basilan Island, January 27, 1906.
Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 190[illegible]
Cumalarang River to Camp No. 6, interior of Basilan Island, February 1, 1906.
Camp No. 6 to Camp No. 7 (near Tipo Tipo), in the interior of Basilan Island, February 2, 1906.
Tipu Tipu to Camp No. 8, interior of Basilan Island, February 3, 1906.
Isabella to Camp No. 1, interior of Basilan Island, Feb. 13, 1906.
Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb 14, 1906.
Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 190[illegible]
Malusa, west Mindoro, February 17, 1906.

(Sheet 1.)

Clivicola riparia (Linn.) (J. E. Gray).

Several seen flying up and down the Laoag River below the town of Laoag, Ilocos Norte Province, Luzon, January 16, 1907.

Very abundant on the Laoag River from Laoag to Dingras, Ilocos Norte Province, Luzon, January 16, 1907.

On streams from Dingras to Sadsan, Ilocos Norte Province, Luzon, January 17, 1907.

Very abundant on the Laoag River from Dingras to Laoag, January 18, 1907. Many were flying in and out of holes in the clay banks of the Laoag River. I dug out two nests which were empty.

Along the Laoag River, below Laoag I noted hundreds of them January 19, 1907. I shot 3. One female showed, by the edematous condition of its abdomen, that it had been setting.

Common, Laoag Valley, below Laoag, Ilocos Norte, Luzon, Jan. 20–22, 1907.
" at Vintar, " " " " 24, 1907.
" " Paoay Lake, " " " " 27, " .
Laoag River and Paoay Lake, " " " Feb. 5, " .
At Bacara, Ilocos Norte Province, Luzon, Feb. 15, 1907.
Several at Bacara River crossing, do , March 9, 1907.

Left in the Bureau of Science: Nos. 14712, 14711, 14779, 14710, 14693, and 14732, from Ilocos Norte Province, Luzon.

519. Hirundo rustica gutturalis (Scop.) ed.
Oriental Swallow.

Breeds. Noted at Maribong, Mindanao, [illegible]
were thence to Camp [illegible]
None were [illegible] Aug. 10, [illegible]
Noted at Zamboanga, Mindanao, P. I. [illegible]
" " Mati, southern " " " [illegible] "
" " Manay, " " " " 23, "
" " Parang, " " " " 15, "
when many were perched on a telephone wire. [illegible]
Abundant on the Rio Grande, Mindanao, October 19, 1903.
Noted at Davao, southern Mindanao, October 2[illegible]
" on west side of Lake Lanao, [illegible], November [illegible]

On the island of Sulu, P. I., November 12 to 26, 1903, this bird was noted as follows: Upon the beach at Siet Lake across the island, November [illegible]; from Hassan's to Upa's residence, November 14; from Upa's cotta to Crater Mt., Nov. 15; in the vicinity of Crater Mountain, November 15 to 18. Some were seen along the beach between Taglibi and Jolo, November 21, 1903. Jolo, Sulu, November 21–26, 1903.

Noted at Pangapuyan Island off Mindanao about 12 miles east of Zamboanga, February 2, 1904.
Noted at Bulwan, southern Mindanao, January 31, 1904.

519. Hirundo rustica gutturalis (Scopoli). [illegible]
Zamboanga, Mindanao, Dec. 7, 1903. In large flocks around rice paddies.

Abundant on the Cabasaran River, southern Mindanao, January 30, 1904; also at Datto Salis Hassan's place, six miles inland and two miles from the river.

Numerous on Bulwan Island, off southern Mindanao, February 1, 1904.

Numerous on Banga Island (Port Banga), off southern Mindanao, February 1, 1904.

Found at Sambigan, Sambigan Bay, southern Mindanao, February 1 and 2, 1904.

Noted at Iligan, northern Mindanao, February 15, 1904.

Noted at Dindangan and Mucas, on Dindangan Bay, northern Mindanao, P. I., February 16, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Many were seen between Datto Upa's (Upang) residence and his market at Bual, Sulu Island, P. I., February 21, 1904.

Numerous on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, P. I., February 21, 1904.

Noted at Pollok Naval Station, southern Mindanao, March 2, 1904.
" " Cottabato, " " " 3 to 5, "
" " Kudarangan, " " " 6, "

Noted at Camp Vicars (3000 ft.), Mindanao, April [illegible], 1904.
Noted from Camp Vicars to Sowir, on Lake Lanao, Mindanao, April 21, 19[illegible]

519 Hirundo rustica gutturalis (Scopoli).
Oriental Swallow.

September 27, 1903. — The telephone wire, from Pantar to Marahui, Mindanao, fills a long-felt want with these birds. I counted the Swallows perched upon four consecutive reaches of single wire, between poles: 35, 41, 64, and 79 birds.

A few remained on Lake Liguasan, Mindanao, May 17, 1904; but at that date nearly all had migrated. On the 19th I noted: "There are still a few Oriental Swallows." Noted at Surigao and Placer, in northeastern Mindanao, April 20, 1904; at Surigao, April 21, again.

Abundant at Manila, Sept. 20 to 30, 1905.

Abundant at Manila Sept. 27 to 30, 1905, the days following the great typhoon of September 26. During the commencement of the typhoon Swallows were flying about. The last seen were flying near the ground in the protection afforded by the house in which I lived. The next day (Sept. 27) Swallows were numerous; but some were seen with missing rectrices.

Noted at Tubay, northeastern Mindanao, April 22, 1904. In ascending the Tubay River, April 22, 1904, many were seen.

Very abundant about the city wall and moat, Manila, during October and November, 1905. Over the Pasig River they were constantly flitting in numbers

Hirundo rustica gutturalis (Scopoli).

Oriental Swallow.

Noted from Sauir, L. Lanao to Rogayan, Tamaca Valley, Mindanao, April 3, 1904. Noted at Malungan, on the Tamaca River, April 5, 1904, when many were skimming over the water. From Galauan to Basayan, on the Tamaca, many were noted April 8, 1904. On Lake Lanao at Sauir, April 9 and 10, 1904.

Noted at Isabella, Island of Basilan, January 19, 1904.

Abundant at Camp Vicars (altitude about 2900 feet) September 28 and 29, 1903.

Noted at Malabang, Mindanao, Oct. 7-9, 1903.

First of the season (1 bird) seen at Manila, Sept. 9, 1905; many seen in afternoon of Sept. 9 and days following.

Seen at the Government Experimental Farm at San Ramon, Zamboanga District, Mindanao, P.I., March 23, 1906.

Not seen for some time (April 25, 1906).

Abundant at Pantar and L. Lanao, September 1903.

Seranaya Marsh to Labak, Libungan Valley, east of Cotabato, southern Mindanao, March 12 and 13, 1904.

Barak and Seranaya, Rio Grande Valley, Mindanao, March 9-11, 1904. Observed to follow grass fires in pursuit of the insects driven from the burning grass.

Noted as abundant from the Seranaya estero to the mouth of the Rio Grande, Mindanao, March 14, 1904.

Zamboanga, March 15, 1904.

Lake Mainit, Northern Mindanao, April 24, 1904.

Hirundo rustica gutturalis (Scopoli).

Common on the Dubay River, northern Mindanao, April 22–24, 1904.

Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

From Ade's plantation west to the River, eastern Mindanao, April 27, 1904.

May 7, 1904.—None seen lately.

Sept., 1904. Manila, P. I.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Stotsenburg, " " 28, "

Camp Gregg, Pangasinan Province, " " 29, "

Dagupan, " " " " 30, "

Along the Manila and Dagupan Railroad, between Camp Stotsenburg and Camp Gregg, Luzon, Nov. 29, 1905.

Pozorrubio and Twin Peaks, Luzon, Nov. 30, 1905.

Common at Baguio, Benguet, Luzon, Dec. 1–12, 1905.

Very numerous at Trinidad, 4500 feet, Benguet Province, Luzon, December 3, 1905.

Mount Santo Tomas, Benguet Province, Luzon, Dec. 10, 1905.

Meade Road, Benguet Province, Luzon, December 13, 1905.

Bued River, below Twin Peaks, Luzon, December [illegible], 1905.

Iloilo, Island of Panay, December 24, [illegible]

Camp Jossman, Island of Guimaras, December 24, [illegible]

(Sheet VI.)

Hirundo rustica gutturalis (Scopoli).

A few between Currimao and Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

A few noted near the Laoag River below the town of Laoag, Ilocos Norte Province, Luzon, January 16, 1907.

Laoag River from Laoag to Dingras, " " 16, "

Abundant from Dingras to Badgan, Ilocos Norte, Luzon, Jan. 17, 1907.

" " " " Laoag " " " " 18, "

" in the Laoag Valley below Laoag, do — " 19, "

" , Laoag Valley, below Laoag, Ilocos Norte, Luzon, Jan. 20-22, 1907.

Common from Laoag to Vintar Lake, do " 23-24, "

" on Paoay Lake, do " 27, "

Laoag River and Paoay Lake, do Feb. 5, "

Abundant from Laoag to Nagpartian, do " 15, "

At Nagpartian it was only noted on February 21, 1907.

Common, " to Laoag, Ilocos Norte, Luzon, March 9, 1907.

A few from Legaspi to Twin Peaks, Pangasinan, Luzon, Dec. 23, 1906.

Abundant on the base of Mount Mayon, Legaspi side, ~~up to~~ from 1000 to 3000 feet altitude, Albay Province, Luzon, March 28, 1907.

I saw perhaps a score of occupied nests in a large church, at Tabaco, Albay Province, Luzon, March 29, 1907.

Flocks were continually crossing Lake Mangan, Mindoro, from south to north, March 25, 1907.

(Sheet VII.)

Hirundo rustica gutturalis (Scopoli).

On Palmas Island none were seen January 21, 1906; but, on October 7, 1906, hundreds were flitting about, and two specimens were obtained:

14392. ♂ ad. Palmas Island, October 7, 1906.

14393. ♂

Noted at Davao, Mindanao, January 2[illegible], 19[illegible]

do

Balut Island, Sarangani group, October 8, 1906.

Tipo Tipo to Camp No. 8, interior of Basilan Island, Feb. 3, 190[illegible]

Camp No. 8 to La Mitan, north Basilan, February 4, 190[illegible]

Tipu Tipu, interior of Basilan Island, February 15, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Lower Calubig River, north Samar, October 1, 1906.

Abundant at Burengo, Calubig River, north Samar, October 1, 1906, when No. 14334, ♀ ad., was collected.

General Wood shot 3 at Panang, east Samar, Oct. 3, 1906, of which I preserved No. 14350, ♀ ad.

Bucas Island, off northeast Mindanao, October 4, 190[illegible]

Lumi Calicut River, east Mindanao, October 5, 1906.

Manay, east Mindanao, October 6, 1906.

Tumindao Island, off Sitonki Island, October 13, 1906.

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

Melville, Balabak Island, October 16, 1906

Numerous on Corregidor Island, Manila Bay, December 16, 1906.

A large flock on Dimalue Island, off Tawi Tawi Island, January 8, 1906.

Hirundo rustica gutturalis (Doerpoli).

Siatu, Siassi Island, January 9, 1906; abundant back of the town.

Zamboanga, Mindanao, January 12, 1906.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Diet Lake, March 1 and 2, 1906.

Lower Rio Grande, southern Mindanao, March 15, 1906.

Malabang, southern Mindanao, March 15, 1906.

Cagayan, west coast of Samar Island, September 5, 1906.

Cuyo Island, Sulu Sea, September 10, 1906; quite numerous.

Marigina Valley, Rizal Province Luzon, September 17, 1906.

Manila, Pasig, Taytay, and Antipolo, Luzon, September 21, 1906.

520. Hirundo javanica Sparrman
Javan Swallow.

[illegible]

None were seen at Tawitaw or Mar[illegible]

Noted at Zamboanga, Mindanao, P. I., [illegible]

These Swallows were building in the post hospital, and in the salesroom, saloon, and billiard room of the principal store of Davao, Mindanao, October 24, 1903.

December 2, 1903, these Swallows were numerous in the town of Zamboanga, Mindanao, P. I.

Zamboanga, Dec. 7, 1903. Common in pairs around houses in the town.

Noted at old Fort Sagar Sofia, at Margossatubig, on Dumanquilas Bay, southern Mindanao, January ~~29~~ 30, 1904.

Noted at Bung Bung, southern Mindanao, Jan. 30, 1904.

Seen on the last six miles of the Cabasaran River, southern Mindanao, and at the place of Datto Salis Hasim, January 31, 1904.

Abundant at Siassay, island of Siassay, P. I., February 4, 1904. Building nests on houses at the dock. Noted at Malabang, Mindanao, March [illegible]

520. Hirundo javanica Sparrman. Java Swallow.

Noted at the town of Santa Maria, northern Mindanao, February 17, 1904.

This Swallow was quite numerous on the island of Cagayan Sulu, P. I., February 25 and 26, 1904. As I climbed along the rocky shore many were seen; and they often alighted along the rough overhanging cliffs close to the water. Mariano de Lion the Filipino Presidente of the island said that two species occur on Cagayan Sulu; but all that I saw were this one. One specimen (No. 13389 ♂ad.) was taken. Abundant about a weedy pond in a grassy crater-basin.

Noted at the Polloc Naval Station, Mindanao, P. I., March 2, 1904.

" " Cottabato, Rio Grande Valley, " " " 3–5, " .

This Swallow built a nest in the public store at Parang, Mindanao.

Noted at Isabella, Island of Basilan, P. I., January 19, 1904.

I returned to Manila July 26, 1905, and saw no Swallow before August 15, 1905, when two of this species were seen flying together.

Common at Malabang, southern Mindanao, Oct. 7–9, 1905.

One seen at Manila, P. I., September 5, 1905. On Sept. 16, many Swallows were seen about Manila, but all that I identified were H. r. gutturalis. This species is, apparently, not very common at Manila.

Noted at Surigao and Placer, northeastern Mindanao, April 20, 1904.

(Sheet III.)

Hirundo javanica Sparrman.

Javan Swallow.

At Placer and Surigao, this species was continually alighting on the awning of the steamer "Ranger."

Noted at Baenag, northeastern Mindanao, April 21, 1904.

The Javan Swallow was quite numerous at Dinagat, on the Island of Dinagat, April 21, 1904.

Noted again at Surigao, April 21, 1904.

" at Zamboanga, western Mindanao, July 24 to August 1, 1904.

" " Davao, southern " , July 15 to 20, 1904.

" " San Ramon, Zamboanga Dist., Mindanao, March 23, 1906.

" at Jolo, Sulu, P. I., March 26, 1906.

In the old Spanish fort at Margosa Subig, April 2, 1906, many were nesting. Some nests were on the bamboo eave-poles just outside windows of occupied rooms. The note is like U. S. Barn Swallow.

Always abundant about the buildings of Zamboanga.

A few were seen at Piangs and Cotabato, on the Rio Grande, Mindanao, March 14, 1904.

Zamboanga, March 15, 1904.

A few were noted on the Subay River and on Lake Mainit, April 22-24, 1904.

Noted on the Bacoca River above the mouth of the Tingali, in the interior of Mindanao, May 4, 1904.

Pilar to Yativa, Agusan River, Mindanao, May 6, 1904; one shot; Yativa to Patrocinio, " " " 7, "

Had become scarce when we reached Lake Linao, on the Agusan, May 9, 1904.

Hirundo javanica Sparrman.

From Talacogon to the mouth of the Libang River, it was occasionally seen, and became more and more numerous until Butuan was reached, near the mouth of the Agusan River, Mindanao, May 10 and 11, 1904.

Mouth of Agusan River, Mindanao, May 11, 1904.

"Common" at Jimenez, northern Mindanao, May 12, 1904.

Langarah, northern Mindanao, May 13, 1904.

Baliangao, on Murcialagos Bay, N. Mindanao, May 13, 1904.

Manila, Luzon Id., Aug. 17 to Sept. 15, 1904.

Dagupan, Pangasinan Province, Luzon, November 30, 1905.

A few were seen at Baguio, Benguet, Dec. 1–12, 1905.

Several at Trinidad, 4500 feet altitude, Benguet Province, Luzon, Dec. 3, 1905.

Base of Santo Tomas Peak, at altitude of 5500 feet, Benguet Province, Luzon, December 9 and 10, 1905.

Noted on three small, wooded islets off the south end of Dibutu Island, January 5, 1905.

Abundant from Vintar to Nagpartian, Ilocos Norte Province, Luzon, February 15, 1907, often perching in pairs on telegraph wires.

Not uncommon at Nagpartian, February 15 to March 9, 1907.

Common from Nagpartian to Laoag, Ilocos Norte, Luzon, March 9, 1907.

This, the only species of swallow seen in Benguet highlands from Dec. 24, 1906 to January 4, 1907, was abundant in open, grassy lands around at the base of Santo Tomas Peak; and 20 were seen up to 7000 feet on Santo Tomas, January 1, 1907.

Hirundo javanica Sparrman.

Legaspi, Albay Province, Luzon, March 28, 1907.
Abundant at Lucena, southern Luzon, March 30, 1907, breeding in the houses.

Seen at Baguio, thence to Sublaan, on the Naguilian River, at Naguilian, and a few thence to the coast at San Fernando, ~~March~~ May 17 and 20, 1907.

San Fernando, La Union Province, Luzon, May 20-25, 1907.

Aparri, northern Luzon, May 29, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Baler, east coast of Luzon, June 2, 1907.

Tibi, and Pili Hot Springs, southeastern Luzon, June 3, 1907.

Tabaco and base of Mount Mayon, Albay Province, Luzon, June 4 and 5, 1907.

Abundant, May 27, 1907, on Bataan Island, breeding in houses at Santo Domingo de Basco and in cavernous hollows along the shore.

Found breeding on Fuga Island, P. I., May 29 and 30, 1907.

Calapan, Mindoro, October 31, 1906.

Davao, Mindanao, January 22, 1906.

Sarangani Island, off southern Mindanao, January 23, 1906.

Abundant at Isabella, Basilan, January 26 and 27, 1906.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.

Camp No. 3 to Camp No. 4, northwest Basilan, January 30, 1906.

(Sheet VI.)

Hirundo javanica Sparrman

Camp No. 4 to Camp No. 5, northwest Basilan, Jan. 31, 1906.
Tipo Tipo to Camp No. 8, interior of Basilan Id., Feb. 3, 1906.
Camp No. 8 to La Mitan, north Basilan, February 4, 1906.
Isabella, Basilan Island, February 13, 1906.
Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.
Camp No. 7 to Camp No. 8, Basilan, Feb. 20, 1906; No. 13965, Sad.
Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.
Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.
Borongan, east Samar, October 3, 1906.
Bucas Island, off northeast Mindanao, October 4, 1906.
Lower Cateel River, east Mindanao, October 5, 1906.
Very abundant on Sulu Island, between Jolo and Bud Dajo Peak, October 11, 1906.
Siasi Island, October 12, 1906; numerous.
One; on Loran Island, off Ubian Island, October 12, 1906.
Sumindao Island, off Sitanki Island, October 13, 1906.
Cagayan Sulu Island, Sulu Sea, October 15, 1906.
Melville, Balabak Island, October 16, 1906.
General Wood shot one on Lumbucan Island, Oct. 16, 1906.
Balambing, Tawi Tawi Island, January 6, 1906.
Abundant, breeding in the town of Siatu, Siasi Island, January 9, 1906.

Hirundo javanica Sparrman.

Jolo, Sulu Island, January 9, 1906.
Zamboanga, Mindanao, January 12, 1906.
Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Cotabato, southern Mindanao, March 15, 1906.
Malabang, southern Mindanao, March 15, 1906.
At Margosatubig, southern Mindanao, ~~Then~~ April 2, 1906, these swallows were breeding in Fort San Sofia. Some had nests on the gun-holes of Dr. Kierulff's quarters in this old Spanish fort. One nest, outside of window, contained eggs. I noted that its note closely resembled that of our Barn Swallow.
Margosatubig, southern Mindanao, August 16, 1906.
Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.
Ayala, western Mindanao, August 27, 1906.
Cebu, Cebu Island, September 3, 1906.
Mactan Island, off the east coast of Cebu Island, September 3, 1906.
Cuyo Island, Sulu Sea, September 10, 1906.
Leper colony, Calamian Island, September 13, 1906.
Davao, southern Mindanao, June 13, 1904.
Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.
Davao, southern Mindanao, July 16 to 20, 1904.

(Sheet VIII.)

Hirundo javanica Sparrman.

Camp Overton, northern Mindanao, July 9, 1906.

Camp Overton, northern Mindanao, May 7, 1906.

(Sheet 1.)

Hirundo striolata Boie.

(1) Large number were seen on the Laoag River, near Dingras, Ilocos Norte Province, Luzon, Jan. 16, 1907.

Abundant on the Laoag River from Dingras to Laoag, January 18, 1907.

~~Common on Tonay Lake, Ilocos Norte Province, Luzon, Jan. 27, 1907.~~

One seen on the sea beach near Dairla, Ilocos Norte Province, Luzon, February 15, 1907.

Flocks from Bojeador to Pasuquin, on rivers and sea beaches, Ilocos Norte Province, Luzon, March 9, 1907. Some alighted on a tree.

Flock noted in the base of Mount Mayon, Legaspi side, at the altitude of 2500 feet, Albay Province, Luzon, March 28, 1907.

Abundant at Santo Domingo de Baseo, Batan Island, P. I., May 27, 1907.

H

514. *Siphia philippinensis* (Sharpe).

Lake Lanao, Mindanao (altitude 2000 feet). Sept., 1903.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.
Van Deidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.
Camp Stolsenberg " " " 28, "
In the hills bordering the Laoag River, below Laoag, Ilocos Norte Province, Luzon, January 16, 1907.
Dingras to Badsan, Ilocos Norte, Luzon, January 17, 1907.
Two noted on trail from Paoay Lake to Laoag, Febr. 5, "

At Nagpartian, Ilocos Norte Luzon, Feb. 15 to March 9, 1907, this beautiful flycatcher was more common than I found it elsewhere, several being seen almost daily. It was usually seen in the forest or in half-wooded country, often along streams and woodland trails. From my Nagpartian notes: "6 Seen Feb. 26. The male of a pair seen together sang a pretty little ditty. Always found in shady places, not in openings. Shots are nearly always had at too short ranges.
Nagpartian to Vintar, Ilocos Norte, Luzon, March 9, 1907; not uncommon.

(Sheet I.)

Cyornis mindorensis Mearns.

Mindoro Red-breasted Flycatcher.

Cyornis mindorensis Mearns, Philippine Journal of Science, II, October, 1907, p. 356.

Type locality. — Alag River at 500 feet altitude, Mindoro Island, P. I.

Geographical distribution. — Mindoro Island.

The type, No. 14519 ♂ ad., Dec. 1, 1906, was the only specimen taken. McGregor took one on the Rio Baco, near sealevel, Mindoro.

(Sheet I.)

Hemichelidon griseisticta (Swinhoe).

Santo Tomas Mountain, Benguet Province, Luzon, Dec. 10, 1905.
Camp John Hay, Benguet Province, Luzon, April 8, 1907.

Specimens taken, in Mindoro, at: No. 14526 ♀ ad., Camp No. , altitude feet, at junction of and Alag rivers, Dec. 4, 1906; 14541 ♂ ad., Subaan, Dec. 5, 1906.

When I first explored Palmas Island, January 21, 1906, it was not seen; but I collected a specimen on the highest hill, October 7, 1906: No. 14391, ♀ ad., October 7, 1906, Palmas Island, P. I. (This specimen is like the series from Luzon Island.)

Balut Island, Darangani group, off southern Mindanao, January 23, 1906, when I collected a specimen (No. 13946), which Captain Gordon Johnston, U. S. Army, shot, at the altitude of nearly 2000 feet.

Mr. Horace Fletcher shot one on the lower Cateel River, east Mindanao, October 5, 1906.

(Sheet I)

Abundant on Pangapuyan Island off Mindanao about 12 miles east of Zamboanga, December 11, 1903. As usual these birds were found only in the mangrove trees. It was again noted on Pangapuyan Island on December 19, 1903 and February 2, 1904.

Cabo Island, Igat Bay, off W. Mindanao, April 2, 1906.

Ayala, Mindanao, P. I., April 24, 1906.

Abundant in Mangrove swamp at Tubay, at the mouth of the Tubay River, northern Mindanao, April 22 and 24, 1904.

Abundant in the mangroves on the coral shores at Baliangao, on Misamis Bay, northern Mindanao, May 13, 1904; male shot.

Isabella, Basilan Island, January 26, 1906.

In descending the River, between camps 3 and 4, northwest Basilan, January 30, 1906, flocks of these noisy little birds were found among the mangroves bordering the stream.

Mangroves on seashore, between Camp No. 8 and Camp No. 9 (Musser's plantation), north Basilan, February 21, 1904.

[near site of Dovey's Camp No. 4, Jan. 30–31, 1906] west coast of Basilan Island, March 3, 1906.

Gerygone rhizophorae Mearns.

Philippine Mangrove Gerygone.

Abundant in mangroves at mouth of Tubay River, northeastern Mindanao, April 22, 1904.

I saw two Gerygones in a mangrove on the shore at Tanang, east Samar, October 3, 1906, which may have been this species.

Mouth of Malaling River, near Malabang, southern Mindanao, March 15, 1906.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Iligat Bay, off south Mindanao, April 2, 1906.

Ayala, western Mindanao, August 27, 19[illegible].

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

(Sheet I.)

Muscicapula westermanni Sharpe.

Cheet-chee-dah'-dah (Igorotes of Benguet).
Toom-piss', Bagobos of Mount Apo, Mindanao.
Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

Not uncommon at Baguio, Benguet Province Luzon, December 1 to 12, 1905.

Pablo Tomas Montlan, Benguet Province, Luzon, December [illegible]

[illegible] in the pines, [illegible] Benguet, [illegible] July, [illegible], I [illegible] usually perched [illegible] trees, [illegible] but often flitting about, [illegible] recently from the nest, [illegible] and some of them were collected.

I saw another [illegible] the line kill [illegible] Brent's Igorote School, at Baguio, Benguet.

From [illegible] November 24, 1905 to January, 1906, [illegible] were seen on Mount [illegible] but one was shot at [illegible] feet altitude. [illegible] specimen [illegible] and compare specimens.

One at Camp No. 5, altitude 4500 feet, on a spur of Mount Halcon, Mindoro, November 15, 1906. This bird was shot from a treetop, but ran into a hole among the rocks. It was seen several times afterwards but always escaped in the [illegible]

(Sheet I.)

Muscicapula luzoniensis Grant.

One seen on Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

A few were seen and a specimen taken at Heights-in-the-oaks, Benguet Province, Luzon, during the first week of August, 1907.

Seen on Mount Santo Tomas, at 7000 feet, Jan. 1, 1907.

(Sheet I.)

Muscicapula basilanica (Sharpe).

I shot one specimen of this rare species on Basilan Island. I think it was No. 13939, sex? ad., February 2, 1906, taken between Camp No. 6 and Camp No. 7, near Lipo Lipo, in the interior of Basilan. It is entered in my field register as "Red-tailed Flycatcher". Later, I discovered a specimen of this species in Mr. McGregor's Basilan Collection, called Rhinomyias ruficauda and pointed it out to McGregor.

(Sheet II.)

Muscicapula westermanni Sharpe

Specimens from Mount Malindang, Mindanao, are like the series from Luzon Island (Benguet Highlands).

(Sheet III.)

Hypothymis occipitalis (Vigors).

One at Bulug, east side of Davao Gulf, southern Mindanao, June 12, 1904.
Davao, southern Mindanao, June 13, 1904.
Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.

(Sheet I.)

Muscicapula montigena Mearns.

Mount Apo Flycatcher.

K'ri'-kri or Sal-yb-see'-bon (Bagobo).

Nos. 13658 and 13659, a mated pair, had the con=
=junctiva a brilliant blue.

(Sheet 1.)

Gerygone simplex Cabanis.

Dagupan River, Pangasinan Province, Luzon, November 30, 1905.
Near mouth of Laoag River, Ilocos Norte, Luzon, January 16, 1907.
In the Laoag River Valley, below Laoag, January 19, 1907, I found it in flocks in low trees near the river. Notes a sweet, fine, exceedingly high-pitched warble.
Common, Laoag Valley, below Laoag, Ilocos Norte, Luzon, Jan. 20-22, 1907.
January 27, 1907, I found it abundant at Paoay Lake, Ilocos Norte Province, Luzon, where it sang its high-pitched song in trees bordering the lake, sometimes descending to bushes growing in shallow water along the margin.
Laoag River and Paoay Lake, Ilocos Norte, Luzon, Febr. 5, 1907.

Behr-kohs', Bagobos of Mount Apo, Mindanao. Sheet I.
occipitalis (Vigors).

492. Hypothymis [illegible].

Indian Black-naped Blue Flycatcher.

Ma-na-na-reeg (Moros of [illegible]). No 12945.

Hypothymis superciliaris Sharpe.

Sharpe's Blue Flycatcher.

[illegible] species were collected at [illegible], Mindanao

" " " " [illegible]

Noted at Mati, southern Mindanao, P.I., [illegible]

" at Davao, " " " " "

Be'-lu Be'-lu (Moros of Mindanao).

Noted between Camp Vicars and Malabang, Mindanao, April 11, 1907.

H. azurea was noted at Davao, southern Mindanao, July 15 to 20, 1904.

Zamboanga, April 9, 1906.

Abundant (both species) at Paniran, Mindanao (altitude 1800 feet). August 5, 1903.

H. azurea was abundant on the shores of the Tubay River, northeastern Mindanao, April 22 to 24, 1904.

H. azurea. Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

Camp Hotsenburg, Luzon, Nov. 28, 1905 (H. azurea).

H. azurea. — Abundant at Nagpartian, Ilocos Norte Province, Luzon, Feb. 15 to Mar. 9, 1907; usually in woodland beside streams.

Nanjan to Lake Nanjan, eastern Mindoro, March 25, 1907; one female shot. Abundant from Dubaan to the Benibi River, eastern Mindoro, Nov. 2, 1907.

occipitalis (Vigors). (Sheet II.)

Hypothymis ~~azurea (Boddaert)~~.

Lower Subaan River, Mindoro, Nov. 2, 1906.

Benibi River, Mindoro, No. 4, 1906.

Specimens taken, in Mindoro, at: Subaan, Dec. 6; Calapan, Dec. 8.

Near Isabella, Basilan Island, January 26, 1906.

Near Camp No. 2, west of Isabella, Basilan Id., January 28, 1906.

Isabella to Camp No. 1, interior of Basilan Id., Febr. 13, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.

Camp No. 2 to Camp No. 3, at Tipu Tipu, Basilan Id., Feb. 15, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Near Molusa, west Basilan, February 19, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

No. 13980, ♂ad., was shot at Musser's plantation, near Isa=
=bella, Basilan, Feb. 22, 1906, when it was quite common.

Manay, east Mindanao, October 6, 1906.

Melville, Balabak Island, October 16, 1906, when No. 14441, ♀ad., was collected.

Sibutu town, west coast of Sibutu Island, January 7, 1906, when a specimen was taken.

One shot near the beach at , [near site of Dorey's camp 4, Jan. 30-31, 1906], west coast of Basilan, March 3, 1906.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Igat Bay, off south Mindanao, April 2, 1906.

497. Rhipidura nigritorquis Vigors.
Fan-tailed Flycatcher.
Maria Capra (Filipinos of southern Mindanao).

Not seen at Pantar or Mi[illegible]
Noted at Murray, southeastern Mindanao, P.I., October 23, 1903.
Several were seen and one collected, at Bula, on Sarangani Bay, southern Mindanao, October 26, 1903.
One pair seen at Upas Poia, on the island of Sulu, November 14, 1903; very common around Jolo, Sulu, P.I. = = November 21–26, 1903; some were seen at Tagbibi, Sulu, November [illegible] 21, 1903. Common at Jolo, Sulu, Nov. [illegible] 1903.
Abundant at Zamboanga, Mindanao, P.I., December 2, 1903.
Noted at Buluan, southern Mindanao, P.I., January 31, 1904.
Several (one shot) on Buluan Island, off southern Mindanao, Febr. 1, 1904.
Seen on the island of Banga (Port Banga) off southern Mindanao, February 1, 1904.
Zamboanga, Mindanao, February 3, 1904. House cat on grape arbor in back-yard. Fantail came and threatened the sleepy cat, flirted its tail almost in pussy's face and even had the temerity to turn its back at distance of two feet. Then Fantail flew to the roof, and was seen no more.

Fan-tailed Flycatcher. 170 (Sheet II.)

4917. Rhipidura nigritorquis Vigors.

Noted as common at Dipulog, northern Mindanao, P. I., February ~~22~~ 14, 1904.

Noted at Lubungan, northern Mindanao, February 14, 1904.

Several were seen on Dulu Island, P. I., between the residence of Datto Uparand his market at Bual, Feb. 21, 1904.

Abundant at Cottabato, in the Rio Grande Valley of southern Mindanao, March 3 to 5, 1904.

Several were seen in bamboo along streams between Rayayan and Malangan, Taraca Valley, April 4, 1904; also at Galaman, on the upper Taraca River, April 6, 1904.

Noted on the Bulungu River, Mindanao, May 20, 1904.

At Buluan, on the bamboo along the Buluan River, Mindanao, May 20, 1904, I noted several of these Flycatchers, one of which was seen to chase a Crow, which led me to suppose the Flycatcher to ~~be~~ have been breeding. Its song is a little bit squeaky, but many notes are as soft as those of the American Catbird, which both the song and habits of the Fan-tailed Flycatcher bring to mind.

Noted at the Malala River, and at Simpitan, near Lake Buluan, Mindanao, May 24 to 26, 1904.

Noted on the Buluan River, from Buluan to Pandog (especially numerous at the latter place) May 27, 1904.

At Surigao, northeastern Mindanao, April 20, 1904, a pair of Fan-tailed Flycatchers worried a Crow that flew away with what appeared to be a small egg on its bill.

Rhipidura nigritorquis Vigors.

Fan-tailed Flycatcher.

Noted at Placer, northeastern Mindanao, April 20, 1904.
" " Bacuag, " " " 21, "
" " Tubay, " " " 22, "
" " Zamboanga, western " July 24 to August 1, 1904.
" " " " " Jan. to March, 1906.
" " Jolo, Sulu, P. I., March 26, 1906. Singing.
Always abundant at Zamboanga, Mindanao.
Ayala, Mindanao, P. I., April 24, 1906.
Barak and Deranaya, Rio Grande Valley, Mindanao, March 8-14, 1904.
Upper Libungan River, east of Cottabato, March 17, 18, 1904.
Baliangao, Murcialagos Bay, northern Mindanao, May 13, 1904.
Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.
San Pedro, Nueva Ecija Province, Luzon, November 27, 1905.
Camp Hotsenberg, " " " 28, "
Camp Gregg, Pangasinan Province, " " " 29, "
Dagupan, " " " " " 30, "
Pozorrubro, " " " " " 30, "
From Pozorrubro to Dagupan, " " " Dec. 14, 1905
Dagupan to Bayambang, Pangasinan Province, Luzon, Dec. 15, 1905
Camp Jossman, Island of Guimaras, December 24, 1[illegible]
Common on Dammi Island, Sulu Sea, January 4, 1906.

(Sheet IV.)

Rhipidura nigritorquis Vigors.

Common on three small, wooded islands off the southern extremity of Debuter Island, January [illegible] 1907.

Currimao to Laoag, Ilocos Norte Province, Luzon, January [illegible] 1907.

Very abundant in bamboo bordering roads between Laoag and the river mouth, January 16, 1907.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Very abundant from Dingras (Pallsan) to, Ilocos Norte Province, Luzon, It drops its wings, jerks its tail up and then lowers it slowly. Its call is a rough chirp.

Abundant from Dingras to Laoag, Ilocos Norte, Luzon, January 18, 1907.

" in the Laoag River Valley, below Laoag, do " " " .

" , Laoag Valley, below Laoag, Ilocos Norte, Luzon, Jan. 20-22, 1907.

" from Laoag to Vintar Lake, do " 23-24 " and Febr. 5,

" everywhere from Laoag to Paoay Lake, do " " 27th.

" " " " " Nagpartian, do Febr. 15, 1907.

Abundant at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.

" from " to Laoag, do , March 9, 1907.

One at Lucena, southern Luzon, March 30, 1907.

In ~~bad~~ bamboo from Nagillian to the coast at San Fernando; ~~March~~ May 20, 1907.

Common at San Fernando, La Union Province, Luzon, May 20-25, 1907.

Aparri, northern Luzon, May 29, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

(Sheet V.)

Rhipidura nigritorquis Vigors.

Narangani Island, off southern Mindanao, January 23, 1906.
Near Isabella, Basilan Island, January 26, 1906.
Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.
Camp No. 3, Basilan Island, January 29, 1906.
Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.
Malusa, west Basilan, February 19, 1906.
Burengo, Catubig River, north Samar, October 1, 1906.
Bucas Island, off northeast Mindanao, October 4, 1906, when one was shot.
Lower Cateel River, east Mindanao, October 5, 1906.
Sulu Island from Jolo to Bud Dajo Peak, October 11, 1906.
Abundant, singing sweetly, on Siasi Island, October 12, 1906.
Sibutu town, west coast of Sibutu Island, January 7, 1906.
Siatu, Siasi Island, January 9, 1906.
~~Kah-baa-so-ti~~
Maiá-cap-ah,
East Bolod Island, Sulu Sea, January 10, 1906.
West Bolod Island, Sulu Sea, January 10, 1906.
Jolo, Sulu Island, January 9, 1906.
Zamboanga, Mindanao, January 12, 1906.
Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.
[near site of Dorey's Camp No. 4, January 30-31, 1906] west coast of Basilan Island, March 3, 1906.
Lower Rio Grande, southern Mindanao, March 15, 1906.
Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

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(Sheet VI.)

Rhipidura nigritorquis Vigors.

Cebu Island, Ngat Bay, Mt. Mindanao, April 2, 1906.
Ayala, western Mindanao, August 27, 1906.
Common on Lungo Island, Sulu Sea, September 10, 1906.
Antipolo, Rizal Province, Luzon, September 21, 1906.
Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.
Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.
Cotabato, southern Mindanao, July 23, 1904.

(Sheet I.)

498. Rhipidura cyanoceps (Cassin).

January 17, 1907.

One pair at Pudsan, Ilocos Norte Province, Luzon, P. I. Abundant at Nagpartian, Ilocos Norte Province, Luzon, Feb. 15 to March 9, 1907; usually in pairs, in wooded country, often in the heavy forest or in thin ~~slopes~~ strips of timber along streams; the usual note of this beautiful fan-tailed flycatcher is a snickering similar to that of the chipmunks of the genus Eutamias; in addition to which it utters a loud call and various other notes.

At Heights-in-the-oaks, northern Benguet, Luzon, this very attractive flycatcher was abundant from July 20 to August 3, 1907. Its squirrel-like chickering, and its flirted tail and half-spread wings make it a conspicuous feature of the oak-woods avifauna.

Quite common in pine woods in the vicinity of Camp John Hay, Benguet Province, Luzon, from 4500 to 5000 feet altitude, between December 24, 1906 and January 1, 1907.

(Sheet I.)

Shh'-din, Bagobos, of Mount Apo, Mindanao.

Rhinomyias

This species was quite numerous around Pantar, Mindanao (altitude 1800 feet) in August and September, 1905. This species is not mufrioanda (type locality, Baulan) but is closely related to the Samar form (see specimens of the latter in U.S.N.M.)

Tubas, Libungan Valley, east of Cotabato, March 12, 1904. Sarangani, on Sarangani Bay, southern Mindanao, Coyne.

(Sheet I.)

Rhinomyias

Common at Burengo, Catubig River, north Samar, October 1, 1906; also seen at Lanang, east Samar, October 3, 1906.

(Sheet I.)

Rhinomyias ruficauda (Sharpe).

Isabella, Basilan Island, January 26, 1906.
Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.
Isabella to Camp No. 1, interior of Basilan Island, Feb. 13, 1906.
Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.
Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906.
Near Malusa, west Basilan, February 19, 1906.

(Sheet I.)

Zeocephus cinnamomeus ~~Hartert.~~ Sharpe.

Cinnamon Flycatcher.

A single specimen of this bird was shot for me by Lieutenant Daniel M. Johnston, Seventeenth Infantry, U. S. Army, on the small island of Talicud, off Samal Island, in the Gulf of Davao, Mindanao, P. I., July 17, 1904. Unfortunately its head was carried away by a 45-caliber pistol bullet. This specimen was No. 13714, ♂ ad. No measurements were taken from the fresh specimen.

(Sinuit I.)

Culicicapa helianthea (Wallace).

Olive-yellow Philippine Flycatcher.

This bright yellow-billed flycatcher was not uncommon at Pantar, Mindanao, during the months of August and September, 1903. On a dry watercourse near Matalung Falls many were seen and one shot, September 29, 1903. Its habits are quite like those of the genus Empidonax in the United States.

Bued River Canyon, 3 miles above Twin Peaks, Dec. 1, 1905.

Near summit of Mount Santo Tomas, Benguet Province, Luzon, at about 7000 feet, December 10, 1905.

Bued River Canyon, between Colgan's and Camp No. 4, December 13, 1905.

Pee-lisz'-lisz'-a (Igorotes of Benguet).

[illegible] July 20 to August 13, 1904, [illegible] and seen at [illegible] in the oak woods near the home of Mr. Guy Hay Haight, in northern Benguet, Luzon.

Chaplain Joseph Clemens, U.S. Army, collected it at Camp Keithley, on Lake Lanao, Mindanao.

Paradoxurus

Hospital Sergeant Cook, U.S. Army, showed me a good, well-made skin, which he had obtained from Mataling Falls, on the Vicars–Malabang wagon-road, a few days prior to October 9, 1903.

176 (Sheet 2.)

Kal-lee-to-lee-to, Bagobos of Mount Apo, Mindanao.

51 ~~Stoparola~~ Eumyias ~~u.~~ ayensis nigrilorris (Hartert).

Blue-green Flycatcher.

Mount Apo Black-lored Flycatcher.

Two from Mt. Malindang are like one in the Bureau of Science collection from Mt. Apo, except that the blue extends farther back upon the belly; but the difference is slight, and it may be individual.

(Sheet II.)

Eumyias nigrimentalis (Grant).

Quite numerous at Camp No. 5, on a spur of Mount Halcon, Mindoro, at the altitude of 4500 feet, November 13 to 17, 1906.

Common at Camp No. 6, altitude 6300 feet, Mt. Halcon, Mindoro, Nov. 17-22, 1906.

Common at the Mangyan house, between camps 4 and 5, altitude 3000 feet, Mount Halcon, Mindoro, November 26-28, 1906.

Specimens taken in Mindoro, at: Camp No. 5, altitude 4500 feet, Nov. 14 and 15; Camp No. 6, altitude 6300 feet, Nov. 17 and 19; Camp No. 8, Mangyan house, altitude 3000 feet, Nov. 27, 1906.

~ Artamides

Graucalus? Cuckoo-Shrike.

467. Artamides guillemardi ?

"No. 13339. Graucalus. — ad. Camp near Crater Lake, Sulu, P. I., November 15, 1903."

Noted on the island of Sulu as follows: Between Hassan's and Upa's places, November 14, 1903; between Siet Lake and Crater Lake, November 15, 1903; at a camp ~~beside~~ near Hassan's (cotta in the) swamp, at the foot of Crater Mountain, Nov. 15 to 18, 1903. The flight is swift [illegible]. Some were seen along the beach between Tagbibi and Jolo. Nov. 21, 1903. Seen at Jolo, November 21-26, 1903.

An Artamides was seen between Maibang and Camp Vicars. [illegible]

Based on specimen No. 13,339, I got the following from Richmond: "Graucalus (Caterpiller Shrike): a dark slaty bird, with black wings and tail. Bird larger than a Robin. This Graucalus is a member of the family Campephagidae, all of the species of which have the feathers of the rump stiffened — that is the shafts are stiff. Another member of the family is Lalage terat."

Several were noted, on Sulu Island, between Jolo and Bud Dajo Peak, and one on the apex of Bud Dajo, October 11, 1906.

Sulu Island, — from Jolo to Mainubin, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Artamides Kochi

Mr. Marquis L. Robb gave me a specimen from Zamboanga.

I preserved one of a pair from the Government Experimental Farm at San Ramon, Zamboanga District, Mindanao, P. I., March 23, 1906. The flight and actions of the birds reminded me of Maximilian's Nuteracker.

One seen at Zamboanga, Mindanao, P. I., April 9, 1906.

Tuba, Libungan Valley, east of Cotabato, March 12, 1904.

Near Isabella, Basilan Island, January [illegible]

Tipu Tipu, interior of Basilan Island, February 3, [illegible]

Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, [illegible]

Musser's plantation, near Isabella, Basilan, Feb. 2[illegible]

Manay, east Mindanao, October 6, 1906, [illegible]

Horace Fletcher, shot No. 14379, ♀ad. Iris yellow.

(Sheet I.)

Artamides striatus (Boddaert).

I did not find this species as high as Haight's place, in northern Benguet; but it appeared near Tuckayan as I returned to Baguio-Benguet, at the altitude of 6000 feet. About 10 of these noisy and striking birds were seen at Cuesquiran, on the east Coast of Luzon, June 1, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June [illegible]

(Sheet 1.)

Artamides mindorensis Steere

Mindoro Cuckoo-Shrike

Lower Subaan River, eastern Mindoro, Nov. 2, 1906.

Alag River, Mindoro, Nov. 5-8, 1906.

One family at the Mangyan house, between camps 4 and 5, altitude 3000 feet, Mount Halcon, Mindoro, Nov. 26-28, 1906.

On November 29, 1906, a pair appeared at Camp No 3, altitude 2250 feet, Mount Halcon, Mindoro. One was shot. The male returned to the same tree and uttered loud, squeaky, 3-syllabled notes.

Specimens taken in Mindoro, at: Camp No. 8, Mangyan house, altitude 3000 feet, Nov. 26; Camp No. 3, altitude 2250 feet, Nov. 29; Subaan River, 5 miles west of Subaan, Dec. 5; Subaan, Dec. 5 and 6, 1906.

(Sheet I.)

Artamides dificilis Hartert.

At a Tagbanoa village, 5 miles intand from Bona Bona, San Antonio Bay, east Palawan, October 17, 1906, I saw a pair together in a grove and shot specimen no. 1444♀, ♀ ad. Iris gray-brown, Bill plumbeous-black. Feet and claws plumbeous.

(Sheet I.)

1483 Lalage ~~first reported~~

[illegible]

[illegible]

Observed at Makar and Buta, on Davao Bay, southern Mindanao, [illegible]

Common near Jolo, Sulu Island, November 21-26, 1903; also on other parts of the island, November 12-20, 1903.

Abundant on Dinagdung Island, off Zamboanga, P.I., November 25, 1903.

" at Zamboanga, Mindanao, P.I., December 2, 1903.

" " Pangapuyan Island off Mindanao about 12 miles east of Zamboanga, December 11, 1903; again noted December 19, 1903 and February 2, 1904.

Abundant at Sali's Hasin's place and on the last six miles of the Cabasaran River, southern Mindanao, January 31, 1904.

Noted at Lubungan, northern Mindanao, Feb. 14, 1904.

One was seen on the island of Cagayan Sulu, in the Sulu Sea, February 26, 1904.

Abundant at Cottabato, southern Mindanao, March 3 to 5, 1904.

Noted at Malabang, Mindanao, P.I., March 31, 1904.

Observed between Matalung Falls and Malabang, Mindanao, [illegible]

One was seen near (above) Matalung Falls, Sept. 29, 1903.

179 (Skull II.)

Lalage dominica (Müller).
Pied Cuckoo-Shrike.

Note in some numbers at Malabang, Mindanao, Oct. 7-9, 1903.
Noted at Datto Grande's place and at Camp Butig (above Matalinig Falls), on the Vicars Malabang wagon-road, Oct. 6, 1903.
Noted on the Bulwan River, connecting Lakes Bulwan and Liguasan, Mindanao, May 20 and 21, 1904; also noted at numerous places, when descending the Bulwan River, from Bulwan to Lake Liguasan, May 27, 1904. (Some were seen at Pandog.)
Seen at San Ramon Farm, Zamboanga District, Mindanao, P. I., March 23, 1906.
Seen on Malanipa Island (Grande) off S. Mindanao, April 1, 1906.
Always abundant at Zamboanga, Mindanao, P. I.
Ayala, Mindanao, April 24, 1906.
Kalas, Libungan Valley, east of Cotabato, March 12, 1904.
Libungan River to Dexanaya, Mindanao, March 13, 1904.
Barak, Rio Grande Valley, Mindanao, March 9, 1904.
Noted on Lake Linao, middle Agusan Valley, Mindanao, May 8, 1904.
Baliangao, on Murcialagos Bay, northern Mindanao, May 13, 1904.
Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.
San Pedro, Nueva Ecija Province, Luzon, November 27, 1905.
Camp Stotsenberg, " " " 28, "
Camp Gregg, Pangasinan Province, " " " 29, "
Dagupan, " " " " " 30, "

(Sheet III.)

Lalage dominica (Müller).

Camp Jossman, Island of Guimaras, December 31, 1905

Dammi Island, Sulu Sea, January 4, 1906.

Abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, Jan. 3, 1907

Abundant near mouth of Laoag River do " Jan. 16.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Abundant from Dingras to Paoay, do " 17.

" " " " Laoag, do " 18.

" in the Laoag Valley below Laoag, do " 19, "

" " " " " " " do " 20-22, "

" from " to Vintar Lake, do " 23-24, " and Febr. 5,

Laoag to Paoay Lake and on the lake, do " 27, "

Abundant from Laoag to Nagpartian, do Febr. 15, 1907.

Burdett Manganese Mine, N.W. extremity of Luzon, " 19, "

Uncommon at Nagpartian, Ilocos Norte, " Feb. 15 to March 9, 1907.

Common from " to Laoag, do , March 9, 1907.

Legaspi to Twin Peaks, Sorgisorgon Province, Luzon, December 23, 1906.

Common on the slope of Mount Mayon, Legaspi side up to 2500 feet altitude, Albay Province, Luzon, March 28, 1907.

Noted at Tabaco, Albay Province, Luzon, March 29, 1907.

Nagillian River, above Nagillian; also at the town of Nagillian, Luzon, ~~March~~ May 19 and 20, 1907.

Camp Wallace, La Union Province, Luzon, May 20-25, 1907.

Pili Hot Springs, near Sibi, southeastern Luzon, June 3, 1907.

Mya-cá-pra, Filipinos of Zamboanga. (Sheet IV.)
(Estrellas.) Lalagi dominica (Müller).

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Lower Subaan River, eastern Mindoro, Nov. 2, 1906.

Specimen: No. 14579 ♀ ad., Calapan, eastern Mindoro, Dec. 8, 1906.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.

Malamani Island, off Basilan Island, February 13, 1906.

One on the Jumahobang River, south Basilan, Feb. 16, 1906.

Maluso, west ~~Mindoro~~ Basilan, February 19, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906; specimen No. 13977, ♂ ad., collected.

Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.

Estrellas calls it: Mya-cá-pra.

One was shot by General Wood, on the lower Cateel River, east Mindanao, October 5, 1906.

Abundant on Sulu Island, from Jolo to Bud Dajo, and several on the apex of Bud Dajo, October 11, 1906.

Numerous on Siasi Island, Oct. 12, 1906; No. 14404, ♀ ad.

Very common on Loran Island (off Ubian Id.), October 12, 1906.

Common, October 15, 1906, on Cagayan Sulu Island. I shot one but did not skin it.

Numerous on Simaluc Island, off Tawi Tawi, January 8, 1906.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

[Dorey's Camp 4], west coast Basilan Island, March 3, 1906.

177 (Sheet V.)

Lalage dominica (Müller).

Parang Parang, southern Mindanao, March 14, 1906.
Cotabato, southern Mindanao, March 15, 1906.
Malabang, southern Mindanao, March 15, 1906.
Tangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.
Cebu Island, Igat Bay, off south Mindanao, April 2, 1906.
Agala, western Mindanao, August 27, 1906.
Two were seen on Tuactan Island, off the east coast of Cebu Island, September 3, 1906.
Common, specimen taken, Cuyo Island, Sulu Sea, September 10, 1906.
Suling, east shore of Davao Gulf, southern Mindanao, June 12, 1904.
Davao, southern Mindanao, June 13, 1904.
Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.
Camp Overton, northern Mindanao, July 9, 1906.
Camp Overton, northern Mindanao, May 7, 1906.

(Sheet I.)

Lalage minor (Steere).

Camp Connell, west coast of Samar Island, Sept. 5, 1906; 2 seen in a bushy swamp. No. 14181 is a female of this species from Mount Malindang. I also saw a pair at Camp Connolly, Samar Island, which I at first mistook for *Lalage melanoleuca*.

(Sheet I.)

464. Irene melanochlamys Sharpe.

[illegible]

[illegible] Mindanao

Moros of Pantar and Lake Lanao called it Kah-tee-taa-goó-mah.

Near Isabella, Basilan Island, January 27, 1906.

Near Camp No. 2, west of Isabella, Basilan Island, January 28, 1906.

Between Camp No. 2 and Camp No. 3, Basilan Id., Jan. 29, 1906.

Camp No. 4 to Camp No. 5, northwest of Basilan, January 31, 1906.

Cuinialarang River to Camp No. 6, interior of Basilan Island, February 1, 1906.

No. 13938 was collected between Camp No. 6 and Camp No. 7 (near Tipo Tipo), in the interior of Basilan, February 2, 1906.

Tipo Tipo to Camp No. 8, interior of Basilan Id., February 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Isabella to Camp No. 1, interior of Basilan Island, Feb. 13, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.

Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906.

Jinnahobang River, south Basilan, Feb. 16, 1906.

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Near Malusa, west ~~Mindanao~~ Basilan, February 19, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Iole everetti Tweeddale.

Everett's Yellow Bulbul.

Noted near Malaling Falls, Mindanao, March 31, 1904.

Taken at Pantar; Moro name: Ko-[illegible]-yuh.

Several pairs were noted at Burengo, Calubig River, north Samar, October 1, 1906, when No. 14330, ♂ ad., was collected.

Abundant and noisy on Bucas Island, off northeast Mindanao, October 4, 1906, when three were shot. Specimens 14354 and 14355 were shot by General Wood; sings sweetly at evening.

Dulag, east coast of Leyte, July 25, 1906.

(Sheet I.)

Iole raynaldi Blasius.

This large, noisy bulbul was quite common at Talán, Tawi Tawi Island, January 8, 1906.

Sulu Island, from Jolo to Maimbúng, Bud Dajo, Crater Lake, and Diet Lake, March 1 and 2, 1906.

(Sheet II.)

Iole mindorensis Steere

Specimens taken in Mindoro, at: Lower Subaan River, Nov. 3; Camp No. 1, Benibil River, Nov. 4; Camp No. 3, altitude 2250 feet, Nov. 10 and 11; Camp No. 5, altitude 4500 feet, Nov. 14, 15 and 16; Camp No. 9, at junction of and Alag rivers, altitude feet, Dec. 1; Camp No. 11, at junction of and Alag rivers (1st crossing of the Alag), Dec. 3

(Sheet 1.)

Iole rufigularis (Sharpe).

Near Isabella, Basilan Island, January 26, 1906.
Near Camp No. 2, west of Isabella, Basilan Id., Jan. 28, 1906.
Camp No. 4 to Camp No. 5, northwest Basilan, Jan. 31, 1906.
Tipo Tipo to Camp No. 8, interior of Basilan Island, February 3, 1906.
Camp No. 8 to La Mitan, north Basilan, February 4, 1906.
Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.
Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.
Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.
Near Malusa, west Basilan, February 19, 1906.
Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906;
specimen No. 13972, ♀ ad., collected.
Common at Musser's plantation, near Isabella, Basilan, Feb. 22, 1906.
, [near site of Dorey's Camp 4, Jan. 30, 31, 1906] west coast
of Basilan Island, ~~January~~ March 3, 1906.

(Sheet VI.)

Iole philippensis (Gmelin).

Taliend Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904. This Bulbul is a mimic and imitates parrots and other birds; very abundant at Davao.
Dulag, east coast of Leyte, July 25, 1906.

Bi-ah'-ko, Bagobos of Mount Apo, Mindanao.

Noted at Davao, southern Mindanao, October 2[illegible]

" " Santa Maria, northern " , February 17, 1904.

Captain F. R. McCoy noted these birds as singing in the mountains between Davao and the headwaters of the Alip River, in southern Mindanao, early in June, 1904.

Noted from Camp Vieras to Sonir, on Lake Lanao, Mindanao, April [illegible]

Noted on Lake Lanao, between Sonir and Rogayan, April [illegible]; again noted at Sonir, April [illegible]; and from Camp Vieras to Malabang, [illegible]

Seen at Marahui, Mindanao, September 27, 1903.

Seen at Camp Vieras (altitude about 2900 feet), Mindanao, September 28 and 29, 1903; also between Camp Vieras and Malabang, September 29, 1903; also at Malabang, Mindanao, October 7 to 9, 1903.

Some were seen between Parang and Lake Buliig, Mindanao, September 30 to October 6, 1903.

On the Buluan River, connecting lakes Buluan and Liguasan, Mindanao, May 20 to 22, 1904, it was noted as numerous and singing.

Iole philippensis (Gmelin).
Philippine Streaked Bulbul.

Noted at Bacuag, northeastern Mindanao, April 21, 1904.

At Davao, Southern Mindanao, July 15 to 20, 1904, it was noted as "very abundant, in flocks; imitates Parrots and other birds; very noisy, but sings sweetly."

Seen at the Government Experimental Farm, at San Ramon, Zamboanga District, Mindanao, March 23, 1906.

Ayala, Mindanao, P. I., April 24, 1906.

Sulbas, Libungan Valley, east of Cotabato, March 12, 1906.

Jativa, Agusan River, Mindanao, May 6 and 7, 1904.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

Pozorrubio to Twin Peaks, Luzon, Nov. 30, 1905.

But few were seen in the region surrounding Baguio, Benguet Province, Luzon, Dec. 1–12, 1905.

Summit of Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Zigzag Trail, above Colgan 2, Bued River Valley, Luzon, December 13, 1905.

Bued River, along Benguet Wagon Road, Luzon, Dec. 13 and 14, 1905.

Sadsan, Ilocos Norte Province, Luzon, January 17, 1906.

Burdett Manganese Mine, NW. extremity of Luzon, Feb. 19, 1906.

In the vicinity of Nagpartian, Ilocos Norte, Luzon, from

(Sheet III.)

Iole philippensis (Linelin).

[Abundant at Nagpartian]

Feb. 15 to Mar. 9, 1907. From my notes: "In a single tree, laden with large red flowers, on the outskirts of Nagpartian, Feb. 16th, about 100 were feeding, singing, or noisily quarreling."

Common at sea level, from Bogador to Dairla and Pasuquin, Ilocos Norte Province, Luzon, March 9, 1907.

Not noted in the oak zone at Haightes-in-the-oaks, northern Benguet, Luzon, July 20 to August 3, 1907, it being probable that the fruits on which it feeds are too scarce.

Pozorrubio to Twin Peaks, Luzon, December 23, 1906. Common from Twin Peaks to Lingayen; rare from Lingayen toward Aparri Bay, December 24, 1906.

On December 31, 1906 and January 1, 1907, I found it very abundant on Mount Data Texas, from 5000 feet up to the actual summit. Very noisy. Compared to Cebu specimens the underparts are less striped, crown darker, shade of brown on throat darker and more confined to chin and throat.

Singing at 2500 feet elevation on the slope of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

Pili Hot Springs, near Sibi, southeastern Luzon, June 3, [illegible]

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

(Sheet IV.)

Iole philippensis (Inclin)

Three skins from Mount Santo Tomas, Benguet Province, Luzon, are somewhat different from a series from Sebu Island. They are slightly larger; the bill blacker; less yellow on feathers of belly; and less striped on underparts; chin and throat deeper brown; crown decidedly darker; tail-feathers greener on outer edges.

Heard and seen, at various places from Baguio to the coast at San Fernando, May 19 and 20, 1906.

Common at Casiguran, east coast of Luzon, June [illegible]

Balut Island, Sarangani group, October [illegible], 1906

Abundant, one shot, at Burengo, north Samar, Oct. [illegible] 1906.

" " Lanang, east Samar, October 3, 1906, I shot 4, two of which (Nos. 14346–7) were preserved. These are much darker than those which I shot on Mactan Island, off Cebu. Voice cat-like mixed with a squeaking and loud sweet singing.

Lower Cotcot River, east Mindanao, October 5, 1906

Manay, east Mindanao, October 6, 1906

Iole philippensis. — The specimens from Samar and Bucas islands are darker and greener on the back than those from Luzon; also a trifle smaller, with considerably smaller bills.

(Sheet V.)

Iole philippensis (Gmelin).

Abundant on Corregidor Island, off Manila Bay, December 16, 1906.

Pangiang, on Dumaguilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Sigat Bay, south Mindanao, April 2, 1906.

Agala, western Mindanao, August 27, 1906.

On Mactan Island, off eastern Cebu, September 3, 1906, a form closely related to this species, but readily separated on account of its much paler coloration, was very numerous. The three specimens shot were eaten by ants in my stateroom on the Seward before I had an opportunity to prepare them for preservation. It was abundant and noisy, sometimes singing sweetly, in cocoa-nut palms; also found in rock piles covered with scrub and vines.

Camp Connell, west coast of Samar Island, Sept. 5, 1906.

Antipolo, Rizal Province, Luzon, September 21, 1906.

Abundant at Sulug, on the east shore of the Gulf of Davao, June 12, 1904, when No. 13495, ♀ ad., albinistic specimen was collected.

On June 15, 1904, it was found from the shore of the Gulf of Davao up to 2000 feet on the slope of Mount Apo, Mindanao; specimens 13510 and 13511, 1600 and 2000 feet. Of these two specimens only head, feet, and wing were preserved (in alcohol

Iole mindorensis Steere. (Sheet I.)

Abundant from Naujan, on the coast, to Lake Naujan, eastern Mindoro, March 25, 1907; sang at night.

Subaan to the Benibi River, eastern Mindoro, Nov. 2, 1906.

Abundant on the Benibi River, Mindoro, Nov. 3-5, 1906.

Alag River, Mindoro, Nov. 5-8, 1906. Abundant. Sings sweetly. Utters a sharp chuck and a great variety of harsh, squeaky notes. A fruit eater, noisy, quarrelsome.

Very abundant at Camp No. 3, on ridge at 2250 altitude, Mindoro, Nov. 8-12, 1906.

Abundant on spur of Mt. Halcon, between Camp No. 2 and Camp No. 3, Mindoro, Nov. 8, 1906.

Abundant everywhere from Camp No. 3 (2250 feet) to Camp No. 5 (4500 feet) on Mt. Halcon, Mindoro, Nov. 12 and 13, 1906; numerous at Camp No. 4, altitude 3300 feet, Nov. 26-28, 1906.

Abundant at Camp No. 5, altitude 4500 ft., Mt. Halcon.

Frequent, though not numerous, at Camp No. 6, altitude 6300 feet, Mt. Halcon, Mindoro, Nov. 17-22, 1906.

At Camp No. 3, altitude 2250 feet, Mt. Halcon, Mindoro, November 29, 1906, I heard it utter a loud, 6-note call. Abundant at Bueno Vista Hill, Camp No. , altitude feet, Dec. 4-5, 1906. Squeaks when at play; call note suggests the chuck of Petrophila manillae.

(Sheet 1.)

Poliolophus urostictus (Salvad.)

Wattled Bulbul.

Noted on the Upper Libungan River, east of Cotabato, Mindanao, March [illegible]

Camp No. 2 to Camp No. 3, Basilan Island, January [illegible]

At Camp No. 3, Basilan Island, January [illegible]

Camp No. 4 to Camp No. 5, northwest Basilan, January [illegible]

Tipo Tipo to Camp No. 5, interior of Basilan Id., Feb. 3, 190[illegible]

Camp No. 8 to La Milan, north Basilan, February [illegible], 190[illegible]

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 190[illegible]

Gumahobang River, south Basilan, February 16, 190[illegible]

Buli Buli River to Camp No. 5, south Basilan, February 17, 190[illegible]

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 2[illegible], 190[illegible]

No. 13982, ♀ ad., was collected at Mr. Henry Musser's plantation, 2 miles west of Isabella, Basilan Island, February 22, 1906, when several were seen.

Bucas Island, off northeast Mindanao, October 4, 1906, when No. 14365, ♀ ad., was collected. This specimen is browner (less grayish) than 3 Luzon skins (See Mc. Gregor, in Phil. Journ. Sci., II, No. 5, Oct., 1907, p. 288.)

Jee-boo'-ool, Bagobos of Tagulaya, on the Gulf of Davao
Jib-boo-ool', Bagobos of Todaya, on mount Apo, Mindanao.

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462. Pycnonotus goiavier (Scopoli)

[illegible] ; Guava [illegible]

[illegible] goiavier (Scopoli) the "Yellow-vented Bulbul."

About ten were noted at Malí, southern Mindanao, [illegible]

Noted at Manay, southeastern Mindanao, P. I., [illegible]

Abundant along the Rio Grande, Mindanao, October 19, [illegible]

" at Davao, southern Mindanao, October 2[illegible], 1903.

" " Makar, on Sarangani Bay, southern Mindanao, October 26, 1903.

Noted at the Moro village of Maligam, southern Mindanao, October 25, [illegible].

North side of Lake Lanao, Mindanao, November [illegible]

Noted on the island of Sulu, as follows: Mt Sulemian, November 19, 1903; from Jaglibi to Jolo, November [illegible]; Jolo, Sulu, November 21-26, 1903.

Abundant on Sungdung Island off Sulu, November 25, 1903.

" at Zamboanga, Mindanao, December 2, 1903.

" " Pangapugan Island off Mindanao about 12 miles east of Zamboanga, Dec. 11, 1903, when two specimens were taken; again noted December 19, 1903 and February 2, 1904.

Noted at Bung Bung and on the Cabadaran River, southern Mindanao, January 30, 1904.

Spinus [illegible]; Yellow-rumped [illegible]. (Sheet II.)

462 (Pycnonotus goiavier (Scopoli).

Noted at Buluan, on the mainland of southern Mindanao, January 31, 1904.

Abundant at the residence of Datto Sali's Hasin, two miles from the Cabasaran River of southern Mindanao, January 31, 1904.

Numerous on Buluan Island, off southern Mindanao, February 1, 1904.

Banga Island (Port Banga), southern Mindanao, February 1, 1904.

Found at Tambegan, Tambegan Bay, southern Mindanao, February 1 and 2, 1904.

Found in abundance in trees of the city squares in the town of Jolo, Sulu Island, P. I., February 4, 1904.

Abundant at Dipulog, northern Mindanao, P. I., February 14, 1904.

Abundant at Lubungan, northern Mindanao, February 14, 1904.

Noted at Iligan, northern Mindanao, P. I., February 15, 1904.

Abundant at the Subano villages of Lindangan and Mucas, on Lindangan Bay, northern Mindanao, February 16, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Many were seen between Datto Upa's residence and his market, at Bual, Sulu Island, P. I., February 21, 1904.

Along the wagon-road from Malabang to Cotabato, southern Mindanao, P. I., March 3, 1904.

Lanao Bulbul; Yellow-vented Bulbul. (Sheet III.)

462. Pycnonotus goiavier (Scopoli).

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On the island of Cagayan Sulu, P. I., February 25, 1904, I noted: "In the thickets were plenty of birds that had the appearance and notes of this bird except that I could not discern any white on their heads in the unsatisfactory glimpses that I obtained of them. Very common." Included, unquestioned, in my list of Cagayan Sulu Island birds.

At the Pollok Naval Station and Dry Dock, southern Mindanao, I saw many of them March 2, 1904; one in the aviary of Captain Coffin, U.S. Navy.

Abundant at Cottabato, Rio Grande Valley, southern Mindanao, March 3, 1904, when they were heard singing in the trees beside the dock, and in thickets behind the town.

Noted at Kudarangan, on the Rio Grande, Mindanao, March ~~3 to~~ 5, 1904.

Manila First Division Hospital, Aug. 17–21, 1904. — A pair of these Bulbuls used to sit on telegraph-wires daily, showing their conspicuously white-tipped outer tail-feathers and uttering their cries in cat's voice.

Noted at Sauir, on Lake Lanao, April 10, 1904; also all along the wagon-road from Camp Vicars to Malabang, April 11, 1904.

Noted at Isabella, Island of Basilan, January 19, 1904.

Numerous in and about Manila during July and August, 1905.

Noted near Marahui, Mindanao, September 27, 1903.

462. Pycnonotus goiavier (Scopoli).
Guava Bulbul; Yellow-vented Bulbul.
Noted at Camp Vicars (altitude about 2900 feet) Sept. 28 & 29, 1903.
Noted at Malabang, Mindanao, October 7–9, 1903.
Noted from Parang to the summit of the south coast mountains at Cotarao Pass, and even to the summit of a mountain adjoining the pass which has been named Mount Arnold Hague (altitude 6000 to 7000 feet).
Also noted at Lake Buticq, Mindanao, October 5 and 6, 1903.
Numerous on the Buluan River, which connects lakes Buluan and Liguasan, Mindanao, May 20 to 23, 1904; especially abundant at the Moro settlement of Buluan.
Noted as occurring all along the trail from Buluan to Simpitan, and at the latter place, May 23 to 26, 1904.
Again noted as abundant, in descent of Buluan River, from Buluan to Lake Liguasan, Mindanao, May 27, 1904; especially numerous at Pandog.
Numerous at Manila, Sept. 1 to 20, 1905.
Noted at Surigao and Placer, northeastern Mindanao, April 20, 1904.
Noted at Bacuag, northeastern Mindanao, April 21, 1904.
Noted at Dinagat, Island of Dinagat, April 21, 1904.
Abundant in Manila Sept. 20 to 30, 1905.
Noted at Tubay, northeastern Mindanao, April 22, 1904.
In ascending the Tubay River, April 22, many were seen feeding in flocks.
Noted at Davao, southern Mindanao, July 15 to 20, 1904.

Pycnonotus goiviei (Scopoli).

Guava Bulbul; Yellow-vented Bulbul.

Noted at Zamboanga, western Mindanao, July 24th, August 1, 1904.

Some were always to be seen among the trees and shrubbery of the courtyard in the Army and Navy Club, Manila, during October and November, 1905. These individuals were made secretive and quiet by their surroundings.

Very numerous, in flocks, at the Government Experimental Farm, at San Ramon, Zamboanga District, Mindanao, P. I., March 23, 1906.

Margosa Subig, S. Mindanao, April 2, 1906.

Malanipa Id., S.W. Mindanao, April 1, 1906.

Always very numerous at Zamboanga, Mindanao, P. I.

Ayala, Mindanao, P. I., April 24, 1906.

(Rather uncommon at Pandar, Mindanao (altitude about 1800 feet), Aug. & Sept., 1903.

This bulbul is ~~often~~ commonly kept in cages by the natives, and is easily fed on fruits. I noticed a very attractive one in the aviary of Commander Frederick W. Coffin, at Pollok Naval Station and Dry Dock, southern Mindanao, March 2, 1904.

(Also, Libungan Valley, east of Cotabato, March 12, 1904.

Libungan River to Seranaya, April 13, 1904.

Libungan range to Berak, Rio Grande Valley, Mindanao, March 7–11, 1904. Ditto Ali's Seranaya fort, March [illegible]

(Sheet VI.)

Pycnonotus goiavier (Scopoli).

Vic. Illinde from mouth of Deranaya estero to Cotabato, March 14, [illegible]

Abundant on Lake Mainit and its outlet, the Tubay River, April 22-24, 1904.

Baganga to Christian Ede's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April [illegible] 1904.

From Ede's plantation west to the River, eastern Mindanao, April 27, [illegible]

On the Baccoo River, a tributary of the Agusan, May 4, 1904, ~~but~~ this species was seen for the first time since entering the East Coast Range, [illegible]

On the lower Baccoo, May 4 and 5, 1904, at [illegible], and it also was from Tingalé, on the Baccoo, to Compostela on the Agusan River, May 5, 1904; also on the upper Agusan River below Compostela, May 5, 1904.

Compostela to Pilar, Agusan River, Mindanao, May [illegible] 1904.

Pilar to Jatiwa, " " " " " " " "

Varicella to Lake Linao, Agusan Valley, Mindanao, May 8 and 9, 1904.

Lake Linao to Talacogon, Agusan Valley, Mindanao, [illegible]

Talacogon to Butuan, Agusan Valley, Mindanao, May [illegible]

Agusan River below Butuan, Mindanao, May [illegible]

Yimang, northern Mindanao, May 12, 1904.

Lingaran, northern Mindanao, May 13, 1904

(Sheet VII.)

Pycnonotus goiavier (Scopoli)

Baliangao, on Murcialagos Bay, northern Mindanao, May 13, 1904.

Manila, P. I., August 14 to September 15, 1904

Manila, July 26-29 and 31 to Aug. 4, 1905

Abundant along the Manila and Dagupan Railroad between Manila and Camp Gregg, July 29 and 30, 1905.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp ~~Gregg~~ Hoisenburg, " , " 28, "

Camp Gregg, Pangasinan Province, " , " 29, "

Dagupan, " , " , " 30, "

Pozorrubro to Twin Peaks, Luzon, " 30, "

Twin Peaks to Dagupan, Luzon, Dec. [illegible]

Dagupan to Bayambang, Pangasinan Province, Luzon, Dec. [illegible]

" Iloilo, Island of Panay, December [illegible]

Camp Gossman, Island of Guimaras, December [illegible]

Common from Currimao to Laoag, Ilocos Norte, Luzon, January [illegible]

Very abundant from Laoag to the river mouth, January 16, 1907; has a sweet note.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Abundant from Dingras to Badeau, Ilocos Norte, Luzon, January 17, 1907.

" " " " Laoag, " " " " 18, "

" in the Laoag Valley below Laoag, " " 19, "

Very abundant resident in the ~~city~~ City of Laoag (noted Jan. 20, 1907).

(Sheet VIII.)

Pycnonotus goiavier (Scopoli).

Common, Laoag Valley, below Laoag, Ilocos Norte, Luzon, Jan. 20–22, 1907.
" , " to Vintar Lake, do " 23, 24 " and Feb. 14
Abundant from Laoag to Paoay Lake, do " 14 "
" " " " Naguilian, do Febr. 15, 1907.
Burdett Manganese Mine, NW. extremity of Luzon " 17 "
Naguilian, Ilocos Norte, Luzon, Feb. 15 to March 9, 1907.
" to Laoag, do , March 9, 1907.
Common from Baguio to Twin Peaks, Benguet Road, August 20, 1906.
From Twin Peaks to Baguio do " " 24, "
Abundant from Baguio up to Twin Peaks; and some were found in the wooded ravines as high as 8000 feet.

Legaspi, Albay Province, Luzon, March 28, 1907.
Abundant on the base of Mount Mayon, Legaspi side, up to 2500 feet, Albay Province, Luzon, March 28, 1907.
Noted at Tabaco, Albay Province, Luzon, March 29, 1907.
Abundant at Lucena, southern Luzon, March 30, 1907.
From camp on the Naguilian River at Naguilian to the coast at Camp Wallace, Luzon, ~~[illegible]~~ May 19 and 20, 1907.
Abundant at Camp Wallace, La Union Province, Luzon, May 20–25, 1907. One pair had a nest in the vines covering an officer's quarters. The young hatched out on May 21st. Nest of rubbishy materials, loosely built, resembling the nest of Iotenia virens. Composition, twigs, plant stems,

(Sheet IX.)

Pycnonotus goiavier (Scopoli).

bark, horsehair, string, grass, and seaweed. The birds were bold, noisy, and entered the house whenever no one was in a room.

Common at Casiguran, east coast of Luzon, June 1, 1907.

Baler, east coast of Luzon, June 2, 1907.

Pili Hot Spring 2, near Tibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Abundant from Nauyan, on the coast, to Lake Naujan, eastern Mindoro, March 25, 1907.

Subaan to Benibi River, eastern Mindoro, Nov. 2, 1906.

Specimen: No. 14582 ♂ ad., Calapan, Dec. 8, 1906.

Balut Island, Darangani group, October 8, 1906.

Isabella, Basilan Island, January 26 and 27, 1906.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

At Camp No. 3, Basilan Island, January 30, 1906.

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906.

Tipu Tipu to Camp No. 8, interior of Basilan Island, Feb. 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

(Sheet X.)

Pycnonotus goiavier (Scopoli).

Camp No. 5 to Camp No. 6, south Basilan, Feb. 18, 1906.
Maluso, west Basilan, February 19, 1906.
Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.
Abundant at Musser's plantation, near Isabella, Basilan Island, February 22, 1906.
Very common, one shot, at Burengo, Calubig River, north Samar, October 1, 1906.
Common at Lanang, east Samar, October 3, 1906.
Bucas Island, off northeast Mindanao, October 4, 1906.
Lower Cateel River, east Mindanao, October 5, 1906.
Manay, east Mindanao, October 6, 1906.
On Sulu Island, abundant around Jolo and on summit of Bud Dajo, October 11, 1906.
Siasi Island, October 12, 1906.
Several on Loran Island (off Ubian Id.), October 12, 1906.
East Bolod Island, Sulu Sea, January 10, 1906.
West Bolod Island, Sulu Sea, January 10, 1906.
Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Diet Lake, March 1 and 2, 1906.
[near site of Dorey's camp no. 4, Jan. 30–31, 1906] west coast of Basilan Island, March 3, 1906.
Malabang, southern Mindanao, March 15, 1906.
Cabo Island, Igat Bay, off south Mindanao, April 2, 1906.

(Sheet XI.)

Pycnonotus goiavier (Scopoli).

At Cotabato, southern Mindanao, March 15, 1906, it was feeding in numbers on red flowers of a large tree, around which it fluttered like sunbirds. One chased two crows (at once) away from this tree several times.

Panglipang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Ayala, western Mindanao, August 27, 1906.

Marigina Valley, Rizal Province, Luzon, September 17, 1906.

Antipolo, Rizal Province, Luzon, September 21, 1906.

Dulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Parang Parang, southern Mindanao, March 14, 1906.

Davao, southern Mindanao, June 13, 1904.

Very abundant, June 14, 1904, at Tagulaya, on the west shore of Davao Gulf, Mindanao, where the Bagobos called it Tee-boo'-ool, and Dorner Bolton shot a specimen. No. 13503, ♂ ad.

Noted from Tagulaya up to 1030 feet altitude on base of Mount Apo, southern Mindanao, June 15, 1904.

At 1725 feet altitude, on Apo trail, very many were seen June 16, 1904.

3350 to 3500 feet on Mt. Apo, Mindanao, June 17, 1904.

Foot of Todaya Hill, July 10, 1904, 3550 feet on Mt. Apo, Mind.

Talicud Island, Davao Gulf, off southern Mindanao, July 17, 1904.

Micronous mindanensis Steere.

Mindanao Hairy-backed Bobbler.

Noted between Malibang and Matalung Falls, Mindanao, March 31, 1904

~~Another species of Macronous was Noted in thickets on the hills behind the town of Tabella, on the Island of Basilan, January 19, 1904.~~

Noted at Simpitan, near Lake Buluan, Mindanao, Mar. 24 and 25, 1904.

Noted at Tubay, northeastern Mindanao, April 22, 1904.

Common around Zamboanga, Jan. to April, 1906.

Lake Mainit, northern Mindanao, April 24, 1904.

Many seen, one collected (2nd) at Baliangao, on Murcialagos Bay, northern Mindanao, May 13, 1904.

Balut Island, Sarangani group, October 8, 1906.

Samang, east Samar, October 3, 1906.

Lower Caleel River, east Mindanao, October 5, 1906.

Manay, east Mindanao, October 6, 1906.

Malanipa Island, off south Mindanao, April 1, 1906

Noted at Buing Buing, southern Mindanao, January 30, 1904.

Noted on the Cabasaran River, southern Mindanao, January 30, 1904.

Noted at the Subano villages of Sindangan, and Mucas, on Sindangan Bay, northern Mindanao, February 16, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Panglang, on Dumanguilas Bay, southern Mindanao, August 17, 1906.

Macronous mindanensis Steere.

Cebo Island, Igat Bay, off south Mindanao, April 2, 1906.

Cuyo Island, west coast of Samar Island, September 5, 1906, when I collected No. 14305, & juv.

Suluig, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

Macronous mindanensis montanus Mearns.
Mountain Macronous

Noted at Camp Vicars, altitude 3000 feet, Mindanao, April 1, 1904.
Noted from Camp Vicars (3000 ft.) to Sauir, on Lake Lanao (2000 ft.), April 2, 1904.
Lake Lanao, near Sauir, Mindanao, April 3, 1904. Abundant in bamboo along streams from Rogayan to Taraca River, April 4, 1904.
Some were seen around the Moro cotas bordering the lowest part of the Taraca River, April 5, 1904. Noted on Taraca River as far up as Talauan, April 6, 1904.
Noted near Hualulama's cotta, Taraca Valley, April 7, 1904.
Abundant on Lake Lanao, at Sauir, Mindanao, April 9 and 10, 1904; and between Camp Vicars and Malabang, April 11, 1904.
Abundant at Pantar, Mind. (altitude 1800 feet), Aug. & Sept., 1903.
Observed at 2000 feet altitude, above Tooncahling, on the slope of Mount Apo, Mindanao, June 15, 1904.
Tah-gō'-saa or Tah-gō-saa'-ahn, Bagobos of Mount Apo, Mindanao.
A nest was preserved, from Todaya, altitude 4000 feet on Mount Apo, where two specimens were taken.

(Sheet 1.)

Macronous striaticeps Sharpe.

Near Isabella, Basilan Island, January 27, 1906
Near Camp No. 2, west of Isabella, Basilan Id., Jan. 29, 1906
Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906
Cumalarang River, and Camp No. 6, interior of Basilan, Feb. 1, 1906
Camp No. 6 to Camp No. 7 (near Tipo-Tipo), in the interior of Basilan Island, February 2, 1906.
Camp No. 8, northern Basilan, February 3, 1906
Camp No. 8 to La Mitan, north Basilan, February 4, 1906
Isabella to Camp No. 1, interior of Basilan Island, Feb. 12, 1906
Camp No. 1 to Camp No. 2, interior of Basilan Id, Feb. 14, 1906
Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906
Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906
Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906
Near Maluso, west Basilan, February 19, 1906
Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906
Musser's plantation, near Isabella, Basilan Id., Feb. 22, 1906
Noted in thickets on the hills behind the town of Isabella, Basilan Island, January 19, 1904.
[near site of Dorey's camp No. 4, January 30-31, 1906] west coast of Basilan Island, March 3, 1906.

Geocichla

Ground-Thrush.

One was wounded at Pantar Motel north of Parang, on a riverbottom, Sept. 30, 1903. I saw a ground thrush, between Camp No. 2 and Camp No. 3, Basilan Island, January 29, 1903, which I entered in my notebook as probably Geocichla interpres. The same species was again noted, between Camp No. 1 and Camp No. 2, interior of Basilan Isl., Feb. 14, 1906.

(12) Lives in our yard at Zamboanga.

(Slatt)

498. Myiomela solitaria (P. L. S. Müller).
Blue [illegible]

[illegible] bird. [illegible]
(This may have been a larger, bluer bird.)
on the point of leaving, [illegible]
Noted at Malkan, on Basilan [illegible]

Not uncommon at Zamboanga, Mindanao, P. I.

Five were seen on the island of Cagayan Sulu, in the Sulu Sea, February 26, 1904.

A female [illegible]

One was seen at the residence of the Sultan of Jolo, at the mouth of the Jolo River, April 5, 1904.

One was seen in the church grounds at Zamboanga [illegible]

One was shot (No [illegible] U.S.N.M.) on a launch at Isabella, Basilan, January 19, 1904.

Seen in Manila, September 21 and 29, 1905; Oct. 2, 1905;

A few of these Thrushes were seen in Manila, especially about the city walls and sometimes on the roofs of buildings, during October and November, 1905. They were usually young birds. I saw one adult male November 2, 1905, from my window.

Petrophila manilla Boddaert.
Oriental Blue Rock-Thrush.

Two of these birds, one in plumage of adult male, the other plainer colored, were seen on the tile roof opposite my window, at the Delmonico Hotel, November 12, 1905. My attention was attracted to them by a sweet song, uttered only by the plain-colored bird which I suppose to be the female.

A beautiful male was seen in the old Spanish fort at Pargosa Tubig S. Mindanao, April 2, 1906.

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

Camp Hotsenburg, Luzon, Nov. 28, 1905.

Abundant on the Benguet Wagon Road throughout the Bued River Canyon, Luzon. Nov. 30 and Dec. 1, 1905; perching on rocks and cliffs and sometimes alighting on the ground.

In the region surrounding Baguio, Benguet Province, Luzon, Dec. 1–12, 1905, I found it not uncommon, even in the pine forests, though it also frequented rocky hilltops. At least half were adult birds.

Several were seen about Trinidad Lake, Benguet Province, Luzon, December 3, 1905.

Summit of Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Merdé Road and Bued River Canyon down to Camp No. 4, on the Benguet Wagon Road, [illegible]

(Sheet III.)

Petrophila manilla Boddaert.

Abundant through Bued River Cañon, Luzon, Dec. 13 [illegible]

Bued River to Dagupan, becoming scarce towards Dagupan [illegible]

One seen on a house at Pozorrubio, Pangasinan, Luzon, [illegible]

Dagupan to Bayambang, Pangasinan Province, Luzon, [illegible]

Abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907; bullied by shrikes.

Laoag to Dingras, Ilocos Norte, Luzon January 16, 1907.

Dingras to Pidsan, Ilocos Norte, Luzon, January 17, 1907.

" " Laoag, " " " " 18, " .

About 6 in Laoag Valley below Laoag, do " 19, " .

Common " " " " do " 20-22, " .

" from " to Vintar Lake, do " 23-24, " and Febr. 5, 7

Laoag to Paoay Lake, and at the lake, do " 25, 26

Some were seen along the ocean beaches between Laoag and Bojeador lighthouse, February 15, 1907.

A few, on the sea beaches, from Bojeador to Davila, Ilocos Norte, Luzon, March 9, 1907.

From Twin Peaks upward it became more and more numerous until at Camp John Hay it became abundant, the mostly young birds.

Canyon of Bued River (below Twin Peaks) Luzon, Jan. 14, 1907.

From December 23 to ~~July 15~~ January 15, 1907 it was seen in increasing numbers from Dagupan (sea level) to Baguio (5000 feet); and on Mount Santo Tomas, Benguet Province, Luzon it seen almost at the top (above 7000 feet).

Petrophila manilla Boddaert.

One seen near Baguio, on the Sublaan Trail, Luzon, ~~March~~ May 19, 1907.

Benibi River, Mindoro, November 3 and 4, 1906.

Alag River, Mindoro, Nov. 5–8, 1906.

One at Camp No. 3 on ridge 2250 feet altitude, Mindoro, Nov. 8–12, 1906.

Mangyan house, between camps 3 and 4, altitude 3000 feet, November 26–28, 1906.

At the lowest Mangyan clearing, on Bueno Vista Hill, December 4–5, 1906, Camp No. , altitude feet, Mindoro, these birds flew actively and noisily about at dusk of evening and after dark.

Specimens taken, in Mindoro, at: Camp No. 8, Mangyan house, altitude 3000 feet, Nov. 26; Camp No. 12, ~~at junction of and Alag River (1st lowest crossing)~~ Bueno Vista Hill, altitude feet, Dec. 4; Calapan, Dec. 8, 1906.

Specimen: No. 14595. ♀ juv.; Corregidor Island, off Manila Bay, Dec. 16, 1906.

On the occasion of my first visit to Palmas Island I did not meet with this species; but I saw one on the highest hill, October 7, 1906.

Captain Gordon Johnston, U.S. Army, shot the specimen that I obtained above 2000 feet on Balut Island, off southern Mindanao, January 23, 1906. (No. 13897, ♂ ad.)

(Sheet V.)

Petrophila manila Boddaert.

One collected (No. 14382, ♀) at Manay, east Mindanao, October 6, 1906.

Many seen, all young, on Corregidor Island, off Manila Bay, December 16, 1906.

An adult was seen in old Fort San Sofia, at Margosa=tubig, southern Mindanao, April 2, 1906.

195-a (Sheet 1.)

Calliope calliope (Pallas).

One shot near Currimao, Ilocos Norte, Luzon, January 14, 1907.
In the bamboo bordering a road from Laoag to the
riverinouth, Ilocos Norte, Luzon, Jan. 16, 1907, one was seen.
Dangras to Padsan, do " 17.
Several seen, January 19, 1907, on the ground and in
the lower part of bamboo clumps, near the Laoag River,
below the town of Laoag Ilocos Norte Province, Luzon.
In bamboo hedges from Laoag to Vintar, do Jan. 23-24, 1907.

430. Copsychus mindanensis (Gmelin).

Philippine magpie-robin.

[illegible] (and Bid.)

[illegible]

I shot one at Pandog, on the Buluan River, connecting lakes Buluan and Liguasan, Min=danao, Mar, 27, 1904; but it was lost in the grass.

On April 21, 1904, at Surigao, ~~northeastern~~ Mindanao, I saw a pair on fences and under houses, in town. They were very gentle, and moved about with wings dropped loosely, at their sides.

Ayala, Mindanao, P. I., April 24, 1906.

Agusan River between Pilar and Talavia, Mindanao, May 6, 1904.

Dagupan, Pangasinan Province, Luzon, Nov. 30, 1905.

Pozorrubio to Dagupan, " " " " " "

Saw one ~~between Dagupan and~~ near Bayambang, Pan=gasinan Province, Luzon, December 15, 1905.

Very abundant, in bamboo, by the roadside from Burrinao to Pidding, Ilocos Norte, Luzon, Jan. 14, 1905.

Copsychus mindanensis (Gmelin).

In bamboo bordering roads from Lavag to river mouth, Ilocos Norte Province, Luzon, January 16, 1907.
Lavag to Dingras, Ilocos Norte, Luzon, January 16, 1907.
Many seen between Dingras and Paoay, Ilocos Norte. "
Dingras to Lavag, Ilocos Norte Province, Luzon, January 18, 1907.
One or two seen the Lavag River, below Lavag, do " 19, "
Lavag Valley below Lavag, do " 20-22, "
Several, Lavag to Paoay Lake, Ilocos Norte, Luzon, Feb. 5, 1907.
One pair at Davila, do " 15, "
A few pairs at Naggpartiang, do Feb. 15 to Mar. 9, 1907.
" " " from " to Lavag, usually in bamboo, " 9, "
Isabella, Basilan Island, January 27, 1906.
Camp No. 8 to La Milan, north Basilan, February 4, 1906.
Bucas Island, off northeast Mindanao, October 4, 1906, when a male was shot.
Chaplain Joseph Clemens collected it at Camp Keithley Mindanao (on Lake Lanao), altitude 2200 feet.
Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

[illegible]

This species was seen in abundance in the rice-fields and marshes flanking the mangroves bordering the Celebes Sea at Zamboanga. It has a loud, sweet song.

It was again found in great numbers on Lake Liguasan and Lake Buluan, ~~and~~ as well as along the streams of the Rio Grande de Mindanao. A nest was taken, , 1904, in a marshy part of Lake Liguasan; built in a coarse senna [illegible]

Seen along the marshy banks of the Rio Grande and on Lake Liguasan, Mindanao, [illegible]

Seen at Zamboanga, Mindanao, P. I., December 2, 1903.

Seen in a marshy cogonal near the Subano village of Sindangan, on Sindangan Bay, northern Mindanao, P. I., February 16, 1904; also at Mucas, on Sarangani Bay, " " " " " " .

Noted from Camp Vieras to Sauir, on Lake Lanao, Mindanao, April 2, 190[illegible]

Seen at Buayan near Ragayan and Lake Lanao, Mindanao, [illegible]

. *Acrocephalus orientalis* (Temminck and Schlegel).

The Chinese Great Reed Warbler was lively and abundant on Lake Lignasan, Mindanao, May 17, 1904, when it was continually heard and seen flying above the grassy islands which float in the lake. On May 18, I found and preserved the supposed nest of this bird, which contained no eggs." I made search for nests and eggs, but saw none but this nest of the Great Reed Warbler, which was placed in a senna bush. The bird was seen in the bush. May 19: "The Great Reed Warbler is everywhere in the water-grass."

Common along the Buluan River, between lakes Lignasan and Buluan, Mindanao, May 20 to 23, 1904; also in the marshes bordering Lake Buluan, May 23.

Descending the Buluan River, ~~from~~ between Buluan and Pandog, May 27, 1904, many were seen.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904. Deranaya Fort, March 11, 1904.

Upper Libungan River, east of Cottabato, March 12, 13, 1904.

Noted on the Rio Grande, at the mouth of the estero which drains the Deranaya Marsh, March 14, 1904.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Gregg, Pangasinan Province, " , " 29, 1905.

Pozorrubio, Pangasinan Province, Luzon, Nov. 30, 1905.

(Sheet III.)

Acrocephalus orientalis (Temminck and Schlegel).

Several in cane-grass beside Trinidad Lake, at the altitude of about 4500 feet, in Benguet Province, Luzon, December 3, 1905.

One at Pozorrubro, Pangasinan Province, Luzon, Dec. 14.

Laoag, Ilocos Norte Province, Luzon, March 9, 1907.

Near Bojeador, Davila, Pasuquin, and Vintar, Ilocos Norte Province, Luzon, March 9, 1907.

In long grass near Pozorrubro, Pangasinan Province, Luzon, December 23, 1906.

Abundant on Lake Naujan, Mindoro, March 25, 1907.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

La Mitan River, north Basilan, February 4, 1906.

Siasi Island, October 12, 1906. No. 14403, Bad.

Specimen: No. 15035 was left in the Bureau of Science.

[near site of Dorey's camp No. 4, Jan. 30-31, 1906] west coast of Basilan Island, March 3, 1906.

Locustella

Specimen identified in the Worcester collection as Locustella

Abundant in the cogon and scrubby growth around Pantar, Mindanao, in September, 1903. It utters a sharp little yelping cry.

A Locustella was common on Sulu Island, from Jolo to Maimbum, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906, which may have been L. fasciolata (Gray), which has previously been taken on Sulu and Tawi Tawi islands. See specimen No. 47 collected on Siasi Island.

Locustella ochotensis was the species observed by me at Pantar and Parang Parang, Mindanao. It was also collected by Goodfellow at Davao and along the Davao River (See Ibis for July, 1906). I noted it as the "Yelping Warbler."

I noted "Locustella" on Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

Chestnut-fronted Tailor-bird.

409. Orthotomus frontalis Sharpe.

Pee-cha-goo', Filipinos of Zamboanga. (Estrellas.)

1346 30 134 [illegible]. Species of Orthotomus were seen at Pantar, and Surigao, ~~Mt. Apo, etc.~~, Mindanao, P.I.

Dee'-kee Dee'-kee Tong-ko-wolt (Moros of Zamboanga).

~~Camp Skagg, Pangasanan, Luzon, July 29 and 30, 1905.~~

I heard the song of this bird, on Balut Island, Sarangani group, January 23, 1906; and, on October 8, 1906, several of the birds were seen at close range on the same island.

Pang-pang, on Dumanguilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Iligat Bay, off south Mindanao, April 2, 1906.

Ayala, western Mindanao, August 27, 1906.

Note.—On Mactan Island off Cebu, September 3, 1906, I saw one individual which I noted as a species of Orthotomus resembling O. frontalis; but, since no species of the genus has been found on Cebu Island, to which Mactan Island properly belongs, it seems most probable that I mistook a bird of some other genus for one of this.

Camp Connell, west coast of Samar Island, September 5, 1906, when No. 14304, ♀ ad., was collected; several seen.

Davao, southern Mindanao, July 18-20, 1904.

(Sheet 1.)

Orthotomus castaneiceps Wald.

Camp Jossman, Himaras, December 24, 1905.

(Sheet I.)

Orthotomus chloronotus Grant.

Burdett Manganese Mine, extreme NW. point of Luzon, in Ilocos Norte Province, February 19, 1907.

Abundant at Naguarlian, Ilocos Norte, Luzon, February 15 to March 9, 1907; in addition to its song it utters a series of chucks — practically a rattle, oftenest heard in dry, barren, rocky hills. One of the most remarkable sounds heard in the Philippine woods is the thin warble of this tailorbirds, interspersed with hollow chucks and its common rattle. The effect of the song is very remarkable. In thickets it often flits close to an intruder and utters its short rattle right in ~~his~~ ones face.

At Scalevel at Bojeador and Davila, Ilocos Norte Province, Luzon, March 9, 1907.

On the trail from Baguio to Camp Wallace, ~~between~~ from Dubloan near, to Nagillian, ~~March 17~~ May 17, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Abundant at Baler, east coast of Luzon, June 2, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Left in Bureau of Science: Nos. 15009, 14981, 14905, 14986, and 14977.

(Sheet I.)

Orthotomus cineraceus. Blyth.

Three were seen and one specimen taken on Cagayan Sulu Island, October 15, 1906. Specimen: No. 14432, ♂ ad.

(Sheet 1.)

Orthotomus samarensis Steere.

Specimen No. 14303, ♂ ad., was collected at Lauf Connell, west coast of Samar Island, September 5, 1906. Bill black above, flesh color below. Feet and claws brownish flesh color. Iris brown.

Peet-tor-ro, Moros of Basilan Island. (Sheet 1.)

Orthotomus mearnsi McGregor.

Near Isabella, Basilan Island, January 26 and 27, 1906
Camp No. 1 to Camp No. 2, west of Isabella, Basilan Island, January 28, 1906.
Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906
Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906; Numerous on the River (where I shot Monkey No. 6031), where I collected specimen No. 13928. The Basilan Moros call it Peet-tor-ro.
Isabella, Basilan Id., Feb. 13, 1906; collected No. 13951, Fed.
Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906
Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906
Species like No. 13951, from Buli Buli River to Camp No. 5, south Basilan Feb. 17, 1906
Near Malusa, west Basilan, Feb. 19, 1906; like specimen No. 13951 ~~collection~~
Musser's Plantation, near Isabella, Basilan, Feb. 22, 1906.
[near site of Dorey's Camp No. 4, Jan. 30-31, 1906] west coast of Basilan Island, March 3, 1906.
I shot one the day I measured the cetacean east of La Mitan, Basilan Island.

Orthotomus

Very numerous in scrub growth around the Moro town of Dibutu, west coast of Dibutu Island, January 7, 1906. It follows one about through the scrub, coming so close that it is difficult to shoot good specimens. Two adult males and two adult females were collected. No species of Orthotomus was previously known from Dibutu.

200 and 201

41. Cisticola [illegible]

Cisticola cisticola (T[illegible]). [illegible] Green-Backed Cow-tay' (Mimes of Lake Lanao). No. 13896.

Cisticola exilis (Vigors and Horsfield). [illegible]

At Pantar, Mindanao, I obtained three (?) forms of birds resembling the common buff-headed Cisticola. All of these cogonal Warblers are included under this heading.

Abundant at Parang, southern Mindanao, Oct. 18, 1903.

Noted on the banks of the Rio Grande, above Cottabato, Mindanao, October 19, 1903.

Abundantly singing in the cogon grass at Makar, on Sarangani Bay, southern Mindanao, October 26, 19[illegible].

Noted from the island of Sulu as follows: On the trail from Upa's house to Crater Lake, November 15, 1903; ~~about~~ around Crater Mountain, November 15 to 18; from Siet Lake to Mt. Suliman and thence to Tagibi, November [illegible] 20.

Abundant at Jolo, Sulu, November 21–26, 1903.

" " Zamboanga, Mindanao, December 2, 1903.

" " Iligan, northern " , February 15, 1904.

Noted on the island of Sulu, P. I., on the trail from Datto Upa's residence to his market at Bual, by the the sea, February 21, 1904.

Specimen of Cisticola (where Cisticola [illegible]) (No. 13429 ♀ ad) at Vicars, April 1, 1904.

200 & 201 (Sheet II.)

Cisticola cisticola (Temminck). Temminck's Grass-Warbler. and Cisticola exilis (Vigors and Horsfield). Red-headed Fantail-Warbler. The short-tailed, yellow-headed species was the more abundant of the two at Pantar. Noted from Camp Vicars to Sonir, on L. Lanao, Mindanao, April 2, 1904. Noted on the Tarucca River below Malungan, April 5, 1904 (both species). C. exilis and C. cisticola were noted at Huahulanan's cotta, April 7, 1904. " " " " " " " from Halauan to Basayan and especially at the latter place, April 8 and 9, 1904.

C. cisticola was noted at Basayan, April 8 and 9; at Sonir, on Lake Lanao and thence to Camp Vicars, April 9 and 10, 1904; numerous at Vicars, April 11, 1904.

Cisticola exilis was noted at Isabella, Island of Basilan, January 19, 1904.

Cisticola exilis was abundant on the outskirts of Manila, where it was often seen flying high and singing during its descent, in July and August, 1905.

Abundant (Cisticola exilis) from Pantar to Marahui, Mindanao, September 27, 1903.

C. exilis was abundant at Camp Vicars (altitude about 2900 feet), September 28 and 29, 1903; also between Camp Vicars and Malaling Falls, September 29, 1903. Abundant about the mouth of the Malaling River and at Malabang, southern Mindanao, Oct. 7–9, 1903.

One or both of these Grass-Warblers (were?) common all along the trail from Buluan to Simpitan (near Lake Buluan), Mindanao, May 23 to 26, 1904. Short-tailed species was seen from Deranaya Marsh to Labas, Libungan Valley, east of Cotabato, March 12 and 13, 1904.

Cisticola cisticola (Temminck). (Subsp.)
Cisticola exilis (Vigors and Horsfield).

The short-tailed, yellow-headed species was found from Piangs to Barak, Rio Grande Valley, Mind., March 7-11, 1906; Datto Ali's Seranaya Fort, March [illegible]

Seranaya to Upper Libungan Valley, Mindanao, March [illegible]

The long-tailed species was abundant and in full song along the Manila and Dagupan Railroad between Manila and Camp Gregg, July 29 and 30, 1905.

Long-tailed sp. at Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.
" San Pedro, Nueva Ecija Province, Luzon, Nov. 27, 1905.
" Camp Stotsenburg, " " " 28, "
" " Gregg, Pangasinan Province, " " " 29, "
" Dagupan, " " " " 30,
" Pozorrubro to Twin Peaks, " " 30, "
" Quite common in openings of the pine woods around Baguio, Benguet Province, Luzon, Dec. 1-12, 1905.

Long-tailed sp. was abundant at Trinidad, 4500 feet, Benguet Province, Luzon, December 3, 1905.

Base of Mount Santo Tomas, Benguet Province, Luzon, December 9 and 10, 1905 — up to 5500 feet.

Camp John Hay to Camp No. 4 on the Benguet Wagon-Road, by way of the Meade Road, Zigzag Trail, and Bued River Canyon, December 13, 1905.

From Bued River to Pozorrubro, Pangasinan, Luzon, Dec. [illegible]
Many at Pozorrubro, Pangasinan Province, Luzon, Dec. [illegible]
Dagupan to Bayambang, " " " [illegible]

(Sheet IV.)

Cisticola cisticola (Temminck) and
Cisticola exilis (Vigors and Horsfield)

(All of my Luzon records are of the long-tailed species.)

The long-tailed species was abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.
Dingras to Sadsan, Ilocos Norte, Luzon, January 17, 1907.
The long-tailed species was noted as "very abundant" in patches of cane-grass bordering the Laoag River, below Laoag, Jan. 19, 1907.
Abundant in the Laoag Valley below Laoag, January 20-22, 1907.
Laoag to Vintar Lake, Ilocos Norte, Luzon, January 23 and 24, 1907 and Febr. 5, 7.
Abundant from Laoag to Laoag Lake, do, " 27 "
"Sand Ridge", between Laoag and Vintar February 7, 1907.
Extreme NW. point of Luzon, Ilocos Norte Province, " 19 ".
Abundant in the open grassy country around Nag=
=partian, Ilocos Norte, Luzon, Feb. 15 to March 9, 1907.
Common in suitable places from Nagpartian to Laoag, Ilocos Norte, Luzon, March 9, 1907.

At Haights-in-the-oaks, near Pawayan, Benguet Province, Luzon, (altitude about 8000 feet), on July 26, 1907, I discovered a nest, in short, wiry grass, on a hillside near a stream, in a large opening in the oak forest which Mr. Haight has named "The Park." The purse-shaped nest was built close to the ground and well concealed. It is of grayish cobwebby materials woven into the grass leaves, with a circular opening for entrance and exit placed above and obliquely to the side.

(Sheet 2.)

Cisticola cisticola (Temminck) and
Cisticola exilis (Vigors and Horsfield).

Nest, on a steep bank in an open meadow-park in front of Mr. Haight's house. Eggs 2, measuring respectively, 16 X 12.8 and 16 X 13 mm. Ground color pure white; finely speckled all over with red-brown, sparsely except at the great end where the spots are aggregated. Nest and 2 eggs in U.S. Nat. Mus.

"One pair in Haight's meadow (which he has named 'The Plaza'). Nest, 2 eggs, and 1 parent preserved."

Lingayen to Twin Peaks, Pangasinan Province, Luzon, Dec. 23, 1906.

One species — No. 14633 — appears to be common in grassy lands throughout Luzon, ranging from sea-level to Haight's in the oaks (about 5000 feet). Quite numerous in grassy openings of the pine woods about Camp John Hay, up to 5000 feet, Dec. 24, 1906 to Jan. 4, 1907.

On the base of Mount Mayon, Albay Province, Luzon, March 28, 1907; it was found in cogon up to 2000 feet.

Noted from Baguio to Naguilian, Luzon, ~~March~~ May 19 and 20, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Pili Hot Springs, near Sibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, from Tabaco up to 4000 feet altitude, Albay Province, Luzon, June 4 and 5, 1907.

This was the first bird I collected on Batan Island, near Santo Domingo de Basco, May 27, 1907.

Abundant in the vicinity of Santo Domingo de Basco, Batan Island, May 27, 1907; pale colored; several shot.

(Sheet VI.)

Cisticola cisticola (Temminck) and
Cisticola exilis (Vigors and Horsfield).

The species frequently collected on Luzon was common on Fuga Island, May 29 and 30, 1907.

Cisticola, long-tailed, abundant from Naujan to Lake Naujan, eastern Mindoro, March 25, 1907.

Cisticola cisticola was noted, between Camp No. 2 and Camp No. 3, Basilan Island, January 29, 1906.

Both species (Cisticola cisticola and C. exilis) were found in the broad cogonals surrounding Tipo Tipo, in the interior of Basilan Island, February 3, 1906.

Both species were found from Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Both species were noted at Tipu Tipu, in the interior of Basilan Island, February 15, 1906.

Both species abundant from Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906.

Both species from Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

Both species noted between Camp No. 8 and Camp No. 9 (Musser's plantation), north Basilan, Feb. 21, 1906.

Cisticola cisticola was noted at Musser's plantation, near Isabella, Basilan, February 22, 1906.

The common, short-tailed Cisticola (noted as "exilis") of Mindanao was common on Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Dist Lake, March 1 and 2, 1906.

Cisticola cisticola (Temminck) and
Cisticola cinnis (Vigors and Horsfield.

Cisticola _____ (the short-tailed one) occurs found at Pang pang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Long-tailed species: Marikina Valley, Rizal, Luzon, Sept. 17, 1906.

Short-tailed species from sea level on the west shore of the Gulf of Davao to the apex of the cogon belt at 1030 feet altitude, June 15, 1904.

Short-tailed species was common on Talicud Island, in the Gulf of Davao, off southern Mindanao, July 17, 1904.

Short-tailed at Davao, southern Mindanao, July 18 to 20, 1904.

408
408. Megalurus palustris Horsfield.

[illegible]

Ca-ck-too'-ch. (Native of Zamboanga).

A pair of these Lark-like birds was collected at Surigao, in northern Mindanao, P. I.

A pair seen, one shot, at Surigao, northeastern Mindanao, April 20, 1904; mate shot April 21, 1905.

Abundant around Manila, September 20 to 30, 1905.

Camp Gregg, Pangasanan, Luzon, July 29 and 30, 1905.

Camp Stotsenburg, " , Nov. 28, 1905.

" Gregg, Pangasanan, Province, " , " 29, " .

Dagupan to Baguio, Luzon, Nov. 30 to Dec. 1, 1905.

Abundant in grassy places, especially along the marshy banks of streams, around Baguio, Benguet Province, Luzon, December 1–12, 1905.

Abundant at Trinidad and around Trinidad Lake, altitude about 4500 feet, Benguet Province, Luzon, December 3, 1905.

Noted up to 6000 feet on Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Meade Road, Benguet Province, Luzon, Dec. 12, 1905.

Abundant from Bued River Canyon to Dagupan, " , " 14, " .

(Sheet II.)

Megalurus palustris Horsfield.

Dagupan to Bayambang, Pangasinan Province, Luzon, Dec. 15, 1905.

Noisy and very abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

Grassy, from Laoag to the rivermouth, January 16, 1907.

Abundant from Laoag to Dingras, Ilocos Norte, Luzon, " " "

Abundant from Dingras to Padsan, January 17, 1907. It flies obliquely upward, then lets itself drop, uttering a prodigious chirping as it drops through the air.

Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

Very abundant in patches of cane grass bordering the Laoag River below the town of Laoag, Ilocos Norte, Luzon, January 19, 1907.

Laoag to Vinton Lake, do " 23-24 " and Febr. 5.

" " Paoay " , do " 27 "

Abundant from Laoag to Nagpartian, do Febr. 15, 1907; flies up into the air and falls singing its rough notes.

Abundant at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.

" from " to Laoag, do , March 9, 1907

A few were seen about Haight's clearings and in the natural meadow near his house, in northern Benguet, Luzon, July 20 to August 3, 1907.

One at Baguio, Benguet Province, Luzon, Dec. 24, 1906.

This bird was seen at various places from sea level at Dagupan to 5000 feet at Camp John Hay, Benguet Province, Luzon, between 1906 Dec. 23 to January 5, 1907.

Megalurus palustris Horsfield.

At foot of Mount Mayon, Albay Province, Luzon, March 28, 1907. Legaspi side of mountain.

One noted at Lucena, southern Luzon, March 30, 1907.

Abundant from Baguio to the coast at San Fernando, ~~March~~ May 19 and 20, 1907.

Aparri, northern Luzon, May 29, 1907.

Tibi and Pili Hot Springs, southeastern Luzon, June 3, 1907.

Base of Mount Mayon up to 4000 feet on the Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Abundant from Naujan to Lake Naujan, eastern Mindoro, March 25, 1907.

Marignina Valley, Rizal Province, Luzon, September 17, 1906.

Pasig and Taytay, Rizal Province, Luzon, September 21, 1906.

(Sheet I.)

Megalurus ruficeps Sharpe

(A few in grassy thickets which choke the heads of canyons descending from near the mountain tops, ~~at~~ near Heights in the vicinity, northern Benguet, Luzon, July 20 to August 3, 1904.

One (No. 14500 ♂) was caught in a mammal trap set behind a dense growth of bushes at the base of a cliff, at Camp No. 7, altitude 5000 feet, on the divide of the main ridge of Mount Halcon, Mindoro, Nov. 22, 1906. The weather was very stormy. Captain Halstead Dorey saw many at Manay, east Mindanao, October 6, 1906, and shot the specimen kept (No. 14380, Fim.).

Marigquina Valley, Luzon (Rizal), September 17, 1906.

(Sheet I.)

Abromis olivacea Mosely.

395. Phylloscopus borealis (Blasius).

Acanthopneuste lugubris (Blyth).

[illegible]

Two specimens, both collected at Pandar (altitude 1800 feet), Mindanao, P. I., are included under P. borealis.

A species of Phylloscopus was also shot (preserved in alcohol), from 1500 to 2000 feet altitude on Mt. Apo, Mindanao, P. I., June, 1904. It was abundant in a forest of bamboo above Toroncabling.

Noted on Lake Lanao, near Sourir, April 3, 1904.

Noted at Rogayan, Taraca Valley, Mindanao, April 4, 1904, in bamboo.

Noted in the pass (Cararao Pass) at the summit of the mountain range between Parang [name meaning Chopping knife] and Lake Buhig, October 14, 1903.

Labas, Libungan Valley, east of Cotabato, March 12, 1904.

[Acanthopneuste borealis was found up to 7000 feet on Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.]

Abromis olivacea Mosley. The birds that I have been calling Acanthopneuste, with yellow-striped under parts and gray-striped crowns — the breeding bird from Pandar and Mount Malindang — are probably this species. Lieutenant McGregor has them so labelled from Bohol and Basilan.

(Sheet II.)

Abrornis olivacea Moseley.

Isabella, Basilan Island, January 27 [illegible].

Compare my specimens supposed to be Abrornis ~~lugubris~~ olivacea Moseley, from Pantar, Mt. Apo, Mt. Malindang, etc. with Acanthopneuste lugubris (Blyth) and A. xanthodryas (Swinhoe). "Also compare with topotypes of A. lugubris to see if the resident Philippine bird [if an Acanthopneuste as I formerly considered it] is not different. (See my notes under Acanthopneuste.)

Nos. 14185, 14113, 14210 are apparently Abrornis olivacea Moseley instead of Acanthopneuste lugubris as I previously identified Mindanao specimens. They are like those labelled Abrornis olivaceus by Mr. Mc Gregor. Left in the Bureau of Science: Nos. 14185, 14113, and 14210.

Abundant on the lower slope of Mount Apo, Mindanao, from 1500 to 2000 feet altitude, June 15, 1904. Those that were shot (Nos. 13508 and 13509) were in bamboo at 1600 feet altitude.

(Sheet I.)

Acanthopneuste borealis (Blas.)

Abundant around Baguio, Benguet Province, Luzon, Dec. 1-12, 1905.

Trinidad, altitude 4500 feet, Benguet Province, Luzon, Dec. 3, 1905.

Up to 7000 feet on Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Pozorrubio, Pangasinan Province, Luzon, Dec. [illegible]

Cauringo to Laoag, Ilocos Norte Province, Luzon, Jan. 14, 1907.

Laoag River near its mouth, Ilocos Norte Province, Jan. 16, 1907.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Dingras to Badsan, do " " " "

" " Laoag, do " " 18, "

Abundant along the Laoag River, below Laoag, do " " 19, "

do do " 20-22, " and Feb. 5-

Abundant from Laoag to Paoay Lake, Ilocos Norte, Luzon, " 27, "

In its actions this bird resembles Regulus calendula.

Laoag to Nagpartian, Ilocos Norte, Luzon, February 15, 1907; utters a rough, chirping call-note.

Noted near Bojeador, Davila, Pasuquin and Bacara, Ilocos Norte Province, Luzon, March 9, 1907.

Noted at Baguio, Benguet Province, Luzon, December 26, 1906.

From December 24, 1906 to January 4, 1907, it was noted as common from 4000 feet up to the actual summit of Mount Santo Tomas, Benguet Province, Luzon.

Camp No. 3, Nov. 8-12, 1906, Mt. Halcon, Mindoro. Abundant. 6300 to 8000 feet on Mt. Halcon, Mindoro, Nov. 21 and 23, 1906.

(Sheet I.)

Boo-ree'-bid, Bagobos of Mount Apo, Mindanao.

394. Artamus leucogaster (Wagler).

Woodswallow; Swallow-Shrike.

Pah'-poss (Moros of Lake Lanao), No. 12946 ♂.

Aa-le-git'-git (Filipinos of Zamboanga).

White-bellied Wood-Swallow; White-[illegible] Swallow — [illegible]

[illegible] Mar, Mind., in August — [illegible]

Noted at Zamboanga, Mindanao, P. I. [illegible]

" " Parang, southern " " " 18, "

Everywhere abundant from the mouth of the Rio Grande up to Lake Lignasan, Mindanao, October 19, [illegible].

Noted at Davao, southern Mindanao, October [illegible].

Noted at Siet Lake and Panglima Hassan's residence, on the island of Sulu, P. I., November 13; at Upa's place, November 14; on the trail from Upa's house to Crater Mountain, November 15; in the vicinity of Crater Mountain, ~~Oct~~ November 15 to 18; along the beach from Taglibi to Jolo, Nov. 2[illegible]; Jolo, November 21-26, 1903.

Seen on Dungdung Island, off Sulu, P. I., November 25, 1903.

Zamboanga, Mindanao, P. I., December 2, 1903.

Noted at Pangapuyan Island off Mindanao about 12 miles east of Zamboanga, December 11, 1903; specimen taken there December 19, 1903; again noted February 2, 1904.

Abundant (1 shot) on Bulwan Island off southern Mindanao, February 1, 1904.

White-bellied Wood-Swallow; White-rumped Swallow - [illegible]

(Sheet II.)

3944. Artamus leucogaster (Vagler).

In small flocks. Flight deliberate. On alighting they huddle on the branches. Its ordinary note is harsh; but, at times, it utters a softer note.

Abundant on the Cabasaran River, southern Mindanao, January 31, 1904.

Numerous (one shot) on Bulman Island, off southern Mindanao, February 1, 1904.

Noted at Jolo, Sulu, February 4, 1904.

Noted at Dipulog, northern Mindanao, P. I., February 14, 1904.

" " Lubungan, " " " "

" " Iligan, " " " February 15, 1904.

Noted at Sindangan and Mucas, on Sindangan Bay, northern Mindanao, P. I., February 16, 1904.

Noted at Santa Maria, northern Mindanao, February 17, 1904.

Abundant between Datto Upa's residence and his market at Bual, Sulu Island, P. I., February 21, 1904.

Noted on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, February 21, 1904.

I did not find it on Cagayan Sulu Island.

Abundant at Cottabato, southern Mindanao, March 3 & 5, 1904.

" " Kudarangan, " " " 6, "

Seen along the wagon-road from Malaybang to Camp Vicars (0 to 3000 ft.), March 31.

Numerous at Camp Vicars (3000 ft.), Mindanao, April 1, 1904.

Noted from Camp Vicars to Sorin, on Lake Lanao, April 2, 1904.

394. Artamus leucogaster (Wagler).
Wood Swallow; Swallow-Shrike.
Noted from Santa to Marahui, Mindanao, September 27, 1903.
Noted at Malabang, southern Mindanao, September 29, 1903.
Lake Liguasan, Mindanao, May 17 to 19, 1904. — "Abundant around the edges of the lake marshes, usually near trees."
May 20, 1904, on the Buluan River, connecting lakes Buluan and Liguasan, this species was noted.
May 22, 1904, around Lake Buluan and the commencement of the Buluan River. Noted at many places along the trail from Buluan to Simpitan, May 23 to 26, 1904.
Returning, down the Buluan River, May 27, it was abundant at Pandog and many other places.
Noted at Surigao, northeastern Mindanao, April 20, 1904.
Noted at Bacuag, northeastern Mindanao, April 21, 1904.
" " Dinagat, on the Island of Dinagat, April 21, 1904.
" " Surigao, northeastern Mindanao, April 21, 1904.
" " Tubay " " 22, " .
Always abundant at Zamboanga.
When ascending the Tubay River, northeastern Mindanao, April 22, 1904, many were seen.
Noted at Zamboanga, Mindanao, August 1, 1904
Noted at Davao, southern Mindanao, July 15 to 20, 1904.
Very few were noted in Manila, July to November, 1905.
Malanipa Id., off SW. Mindanao, April 12, 1906.
Margosa Tubig, S. Mindanao. April 2, 1906

Artamus leucogaster (Nagler).

White-bellied Wood-Swallow; White-rumped Swallow - Shelley.

From Pouir, L. Lanao to Rogayan, Taraca Valley, Mindanao, April 3, 1904.

" Rogayan to Malungan, Taraca Valley, April 4, 1904 in flocks.

From Malungan to the mouth of Taraca River, April 5, 1904. Flocks along the Taraca River between Talauan and Bacayan, April 8, 1904

Noted at Samir, on Lake Lanao, Mindanao, April 9 and 10, 1904.

Noted at Camp Vicars (altitude about 2900 feet), Mindanao, September 28, and 29, 1903; also from Camp Vicars to Malabang, September 29, 1903; and at Malabang, Oct. 7-9, 1903.

Several seen in Manila, ~~October~~ September 6, 1905; also Sept. 8, 1905.

Ayala, Mindanao, April 24, 1906.

An enormous flock roosted in trees about the Quarantine Station, at Marivelis the night of Aug. 1, 1903. On Aug. 2 smaller flocks were seen in the neighboring fields and clearings.

Abundant at Pantar and Lake Lanao, Aug. & Sept., 1903.

Zamboanga, July 24 to Aug. 1, 1904.

Deranaya March to Labas, Libungan Valley, east of Cotabato, March 12 and 13, 1904.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904. Deranaya Fort, March 11-13, 1904.

Rio Grande from mouth of Deranaya estero to the rivermouth, March 14, 1904

Zamboanga, March 15, 1904.

Artamus leucogaster (Wagler).

Abundant on Lake Mainit, northern Mindanao, April 24, 1904.

A few were also seen along the Tubay River, April 22-24, 1904.

Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Ade's plantation to the River, eastern Mindanao, April 27, 1904.

Bucoco River, eastern Mindanao, May 4 and 5, 1904.

Vuricella to Lake Linao, May 8 and 9, 1904; these were the first seen in descending the Agusan River from Compostela; abundant [illegible] Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904.

Talacogon to Buluan, Agusan Valley, Mindanao, May 10 and 11, 1904.

Mouth of Agusan or Buluan River, Mindanao, May [illegible], 1904.

Jimenez, northern Mindanao, May 12, 1904.

Langaran, northern Mindanao, May 13, 1904.

Baliangao, on Murcialagos Bay, northern Mindanao, May 13, 1904.

Abundant between Manila and Camp Gregg along the Manila and Dagupan Railroad, Luzon, July 29 and 30, 1905.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

Vicinity of Manila, Luzon, July to December, 1905.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Hotsenburg, " " " 28, "

Camp Gregg, Pangasinan Province, " " " 29, "

Dagupan, " " " " 30, "

(Sheet VI.)

Artamus leucorhynchus

Along the Manila and Dagupan Railroad between Camp Holzenburg and Camp Gregg, Luzon, Nov. 29, 1905.

Dagupan to Baguio, Luzon, Nov. 30 to Dec. 1, 1905.

A few were seen on the military reserve now called Camp John Hay, near Baguio, Benguet, Luzon, Dec. 1-12, 1905.

Trinidad, Benguet Province, Luzon, Dec. 3, 1905.

Up to 6000 feet on Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Meade Road, Benguet Province, Luzon, D[illegible]

Pozorrubio to Manila, Luzon, Dec. 14 and 15, [illegible]

Camp Gossman, Jolo, December 24, [illegible]

In flocks on three small, wooded islands off the south end of Dibutu Island, January [illegible]

Common from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

Laoag River, below the town of Laoag, Ilocos Norte, Luzon, Jan. 16, 1907.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Dingras to Padsan, do " 17, " "

Very active at dusk.

Abundant everywhere, from Laoag to Paoay Lake, Ilocos Norte Province, Luzon, January 27 and February 5, 1907.

Occasional flocks, Laoag to Nagpartian, Ilocos Norte, Feb. 15, " .

Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.

(Sheet VII.)

Artamus leucorhynchus

Common from Nagpartian to Laoag, Ilocos Norte, March 9, 1907.

Legaspi, Albay Province, Luzon, March 28, 1907.

Everywhere from Legaspi up to 2500 feet on Mount Mayon, Albay Province, Luzon, March 28, 1907.

Lucena, southern Luzon, March 30, 1907.

Baguio to the coast, on the Magillian Trail, Luzon, [illegible] 19 and 20, 1907; [illegible]

San Fernando, La Union Province, Luzon, May 20–25, 1907.

Tibi and Pili Hot Springs, southeastern Luzon, June 3, [illegible]

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, [illegible]

Abundant on the trail from Naujan to the Naujan River, Mindoro, March 25, 1907; also on the Naujan River and Lake Naujan the same day.

Calapan, Mindoro Island, October 31, 1906.

Mouth of Baco River, and Dubaan, Mindoro, Nov. [illegible], 1906.

Specimen: No. 14553 ♀ad., Dubaan, Dec. 6, 19[illegible]

"At Davao, Mindanao, January 22, 1906, I noted a great flock of Swallow-Shrike."

Isabella, Basilan Island, January 26 and 27, [illegible]

Camp No. 2 to Camp No. 3, Basilan Island, January 29, [illegible]

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, [illegible]

Cumalarang River to Camp No. 6, interior of Basilan Island, February 1, 1906.

(Sheet VIII.)

I-gl-e-ap'-as, Jacanes of Basilan Island.

Artamus leucorhynchus (Linnaeus).

Tipu Tipu and Camp No. 8, Basilan Island, Feb. 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Tipu Tipu, interior of Basilan Island, February 15, 1906.

I-gl-e-ap'-as, Jacanes of Basilan Island.

Camp No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Near Malusa, west Basilan, February 19, 1906.

Musser's plantation, near Isabella, Basilan Id., Feb. 22, 1906.

Abundant at Burengo, Catubig River, north Samar, Oct. 1, 1906.

Abundant at Lanang, east Samar, October 3, 1906, when No. 14349, ♂ ad., was shot by General Wood.

Bucas Island, off northeast Mindanao, October 4, 1906.

Abundant on the lower Cotcel River, east Mindanao, October 5, 1906, when No. 14376, ♂ ad., was collected.

Sulu Island, from Jolo to summit of Bud Dajo, October 11, 1906.

Siasi Island, October 12, 1906; common.

Abundant on Loran Island (off Ubian Id.), October 12, 1906, when one was shot.

I preserved specimen No. 14446, ♀ ad., one of two shot by General Wood, on Lumbucan Island, October 16, 1906.

Siatu, Siasi Island, January 9, 1906. Specimen taken.

Kah-baa-so'-ti, [illegible]

(Sheet IX.)

Artamus leucorhynchus (Linnaeus).

Zamboanga, Mindanao, January 12, 1906.
Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Lake Lake, March 1 and 2, 1906.
[near Dorey's Camp No. 4, January 30-31, 1906] west coast of Basilan Island, March 3, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Colabato to mouth of Rio Grande, southern Mindanao, March 15, 1906.
Mulabang, southern Mindanao, March 15, 1906.
Margosatubig, southern Mindanao, August 16, 1906.
Pagadian, on Dumanquilas Bay, southern Mindanao, August 17, 1906.
San Ramon, and Cotabato, western Mindanao, August 27, 1906.
Mactan Island, off Cebu, September 3, 1906.
Camp Connell, west coast of Samar Island, September 5, 1906.
Albuquerque, specimen taken, Cuyo Island, September 10, 1906.
Marikina Valley, Rizal Province, Luzon, September 17, 1906.
Pasig, Taytay, and Antipolo, Rizal Province, Luzon, Sept. 21, 1906.

Some of the dead trees along the beach on the east shore of the Gulf of Davao, at Sulug, were occupied by swallow-shrikes, June 12, 1904.
Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.
Tagulaya up to 1030 feet altitude on base of Mount Apo, Mindanao, June 15, 1904.

(Sheet I.)

391. Lanius nasutus Scopoli.

Cephalophoxus nasutus (Scopoli).

Long-tailed Shrike.

Many were seen along the road from Pantar to Marahui, Mindanao, September 27, 1903.

This Shrike was very abundant on the cogonals around Camp Pantar, altitude 1800 feet, in August and September, 1903.

Noted on the Rio Grande, Mindanao, above Cotta=
=bato, October 19, 1903.

Abundant, one shot, at Iligan, Mind., Feb. 15, 1904.

Abundant at Cottabato, southern Mindanao, P. I., March 3 to 5, 1904.

Noted " Kudarangan, " " " " 6, " .

Noted ~~below~~ from Matalong to Camp Vieras (0–3000 feet), March 31, 1904.

Noted at Camp Vieras (3000 ft.), Mindanao, April 1, 1904.

Noted from Camp Vieras to Sauir, on Lake Lanao, April 2, 1904.

None were seen in the Tamaca Valley, April 2 to 7, 1904; but on April 10, "as soon as we reached the grassy pastures from Sauir to Vieras we again found the Long-tailed Shrike, which had been absent from the Lake Lanao country." Again noted from Camp Vieras to Camp Butig, Mindanao, April 11, 1904.

Observed at Camp Vieras (altitude about 2900 feet), Mindanao, September 28 and 29, 1903; also between Camp Vieras and Mataling Falls, September 29, 1903.

Cephalophoneus nasutus (Scopoli).

Long-tailed Shrike.

Seen at Malabang, Mindanao, October 7-9, 1903.

Seen at Lake Buhig, Mindanao, October 5 and 6, 1903.

One was seen at Fort William McKinley, six miles from Manila, September 22, 1905.

Abundant at Mercedes, 9 m. E. of Zamboanga, Min=
=danao, P. I., March 17, 1906. Two young in first plumage shot.

Pringz to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

Libungan River, east of Cottabato, March 13, 1904.

Rio Grande from mouth of Seranaya estero to ~~the~~ Cotabato, March 14, 1904.

Abundant between Manila and Camp Gregg, on the Manila and Dagupan Railroad, Luzon, July 29 and 30, 1905.

Camp Gregg, Pangasinan, Luzon, July 29, 30, 1905.

Vicinity of Manila, Luzon, July to December, 1905.

Camp Motzenburg, , Luzon, Nov. 28, 1905.

Camp Gregg, Pangasinan Province, " , " 29, ".

Dagupan, " " " " 30, ".

Dagupan to Baguio, Luzon, Nov. 30 to Dec. 1, 1905.

Very common in the vicinity of Baguio, Benguet Province, Luzon, December 1-12, 1905.

(Sheet III.)

Cephalophoneus nasutus (Scopoli).

Common around Trinidad Lake, at about 4500 feet altitude, Benguet Province, Luzon, December 3, 1905. One chased a blue rock thrush.

Up to 5500 feet on Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Meade Road, Benguet Province, Luzon, Dec. [illegible]

Bued River Canyon to Dagupan, Dec. 14, 1905.

Very abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

Laoag to mouth of Laoag River, Jan. 16, 1907; sang a lively lilt song from the bamboo logs; very abundant.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Hundreds were noted from Dingras to Padsan, Ilocos Norte Province, Luzon, January [illegible], 1907.

Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

Abundant, Laoag Valley, below Laoag, do " 22, 1907.

" , " to Vintar Lake, do " 23-24, 1907.

" , " " Paoay " , do " and Feb. 22, 1907.

" , " " Nagpartian, do " Feb. 15, 1907.

" to the extreme northwest point of Luzon, do " 19, " .

Abundant at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.

" from " to Laoag, do , March 9, 1907.

Dagupan to Twin Peaks, Pangasinan Province, Luzon, Dec. 23, 1906.

(Sheet IV.)

Copsychus mindanensis (Scopoli).

Abundant at Baguio, Benguet, Dec. 24, 1906.

Baguio, Benguet Province, Luzon, December 26, 1906.

Common from Sagorrubro to Lagupan, Pangasinan, Luzon, Jan. 4, 1907.

Lagupan to Sagorrubro, Pangasinan Province, Luzon, December 23, 1906; less abundant than Otomela lucionensis.

Abundant from Lucin Peak (Zone 3 and 4) to the base of Mount Santo Tomas, Benguet Province, Luzon, December 24 to 31, 1906. (6000 feet)

Description of nest and eggs, collected at Camp John Hay, Benguet Province, Luzon, May 3, 1907, by Mr. William Dorr Carpenter. Parent, No. 15138, ♀, secured at the nest, which was in the top of a small pine tree (Pinus insularis), at the height of 25 feet above the ground:—

Nest.— Supported by 4 twigs of living branch, 15 millimeters in diameter. Compactly built, outwardly of dry grasses, pine needles, a few plant stems, a few coarse dead ferns, and a small quantity of down from fern fronds. Internally of pine needles and very fine stems of grasses and other plants. Nest cavity symmetrical. Measurements: external diameter, 180 mm.; external depth, 100 mm.; internal diameter, 70 mm.; internal depth, 65 mm.

Eggs.— 4; grayish cream-white, sparsely

(Sheet I.)

392. Lanius tigrinus Drapiez.

[illegible]

On the island of Sulu this beautiful Shrike was [illegible] at Siet Lake and Panglima Hassan's house, November [illegible], 1903; also at Jolo, November 21–26, [illegible].

Many were seen and two shot along the trail between Datto Mpa's residence and his market at Bual, Sulu Island, February 21, 1904.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

(Sheet I.)

Cephalophoneus validirostris (Grant).

Tahl-ahl' (Igorotes of Benguet).

Not uncommon at Haight's-in-the-oaks, Benguet Province, Luzon, July 20 to August 3, 1907. Several [illegible].

(Sheet V.)

Cephalophonus nasutus (Scopoli).

sparsely spotted with purplish brown and yellow=
=ish brown, except a circle around the great
end where the spots are aggregated and larger than
those of the opposite extremity. Measurements:
24×17; 24×18.3; 23×18.5; 22.5×18 mm.
From Baguio to Nagilbsin, Luzon, ~~March~~ May 19 and 20, 1907.
Two were seen, and a specimen (No. 13940) collected
at Tipu Tipu, in the interior of Basilan Island, Feb. 3, 1906.
Camp No. 8 to La Mitan, north Basilan, February 4, 1906.
Tipu Tipu, interior of Basilan Island, February 15, 1906.
Abundant from Camp No. 3 to Camp No. 4, Basilan Is., Feb. 16, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Cotabato, southern Mindanao, March 15, 1906.
Malabang, southern Mindanao, March 15, 1906.
Mariquina Valley, Rizal Province, Luzon, September 17, 1906.
Pasig, Taylay, and Antipolo, Rizal Province, Luzon, Sept. 21, 1906.

390. *Lanius lucionensis* - Linnaeus.

Ge-gede' (Visayan Filipinos of Manay, [illegible]).
Kabe-sote (Filipinos of Zamboanga).
Otomela lucionensis (Latham).
Lesson's Shrike.

Noted at Manay, southeastern Mindanao, October 23, [illegible].
" " Parang, southern " " " 18, "
" on the Rio Grande, " " 19, "
" at Davao, southern " " [illegible]
" " Makar, on Darangani Bay, D. " [illegible]
" " Zamboanga, " December 2, "

Abundant at Dalia Hasin's residence and the last six miles of the Cabasaran River, southern Mindanao, January 31, 1904.

Several seen and one shot on Bulwan Island, off southern Mindanao, February 1, 1904.

Several seen on the island of Banga (Port Banga), off southern Mindanao, February 1, 1904.

Noted at Santa Maria, northern Mindanao, P. I., February 17, 1904. Note a sharp rattle; also a hoarse trumpet note.

Noted at the Pollok Naval Station, southern Mindanao, March 2, 1904.

None were seen at Pantar or Marahui.

Seen at ~~Parang~~ Malabang, Mindanao, March 31, 1904.

Otomela luciensis (Latham).

Luzon Shrike.

In the descent from Camp Vicars to Malabang this Shrike was first seen at Camp Butig.

Noted at Isabella, Island of Basilan, January 19, 1904.

Noted at Malabang, Mindanao, October 7 to 9, 1903.

A number were seen in and about Manila after September 1st, 1905; abundant by the 5th.

Manila, Sept. 20, 1905.— Common, in flocks — probably families — in and around Manila. Its notes have as much variety as those of the American Loggerhead Shrike. They fight, and chase each other high in air, making considerable outcry.

One was seen at Surigao, northeastern Mindanao, April 20, 1904; others April 21.

The Luzon Shrike is replete with animation and loquistic vigor. When fighting in the air its cries are rapidly repeated harsh squeaks, ending in a rattle as it returns to its perch. Then it utters slow rasping cries; but these ~~noises~~ notes by no means exhaust its vocabulary.

During the last 10 days of Sept., 1905, this was the most abundant bird around Manila, with the exception of Pycnonotus monticolus.

Noted at Zamboanga, Mindanao, August 1, 1904.

Otomela lucionensis (Latham).

Luzon Shrike.

Still abundant in Manila, November 9, 1905. It is one of the birds most frequently seen in courts and yards among the houses. In the air it sometimes behaves like a Yellow-breasted Chat. At such times its note is a loud ~~rough~~ rattle.

Seen at the Government Experimental Farm, at San Ramon, Mindanao, P. I., March 23, 1906.

Malanipa Id., P. I., Mindanao, April 1, 1906.

Margosa Tubig, I. Mindanao, April 2, 1906.

Always abundant at Zamboanga, Mindanao, P. I.

Ayala, Mindanao, P. I., April 24, 1906.

Zamboanga, Jul, 24 to Aug. 1, 1904.

Zamboanga, March 15, [illegible]

Manila, P. I., August 17 to Sept. 15, 190[illegible]; as I left the city on the last date these Shrikes uttered their rattling notes from overhead wires.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

Manila, Luzon, July to December, 1905.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Stotsenburg, " " " 28, ".

Camp Gregg, Pangasinan Province, " " 29, ".

Dagupan, " " " 30, ".

Dagupan to Twin Peaks, Luzon, Nov. 30, 1905.

(Sheet IV.)

Otomela luciionensis (Latham).

Trinidad, alt. 4500 ft., Benguet Province, Luzon, December 3, 1905.
Returning from Baguio to Manila, the first was seen just below Twin Peaks; abundance thence to Manila Dec. 14 and 15, 1905.
Dagupan to Bayambang, Pangasinan Province, Luzon, Dec. 18, 1905.
Camp Rossman, Island of Guimaras, December 24, 1905.
Noted on three small, wooded islets, off the south end of Dibutu Island, January 5, 1906.
Manila, Luzon Island, January 12, 1907.
Very abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.
Very abundant from Laoag to the mouth of the Laoag River, Ilocos Norte Province, Luzon, January 16, 1907.
Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.
"Myriads" were noted between Dingras and Padsan, Ilocos Norte Province, Luzon, January 17, 1907.
Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.
Abundant, Laoag Valley, below Laoag, do " 19-22, "
" , " to Vintar Lake, do " 23-24, 1907.
" , " " Paoay " , do " and Feb. 5, 1907.
" , " " Nagpartian, do Febr. 15, 1907.
" to the extreme northwest point of Luzon, do " 19, "
Abundant at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.
" from " " to Laoag, do March 9, 1907.
" " Dagupan to Twin Peaks, Luzon, December 23, 1906.

(Sheet V.)

Mancla lucivensis (Latham).

Abundant from Twin Peaks to Baguio, Benguet, Luzon, Dec. 24, 1906, becoming scarcer above Colgans.

Abundant from Twin Peaks to Dagupan, January 4, 1907.

Legaspi, Albay Province, Luzon, March 28, 1907.

Up to 2000 feet on Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

Noted at Tabaco, Albay Province, Luzon, March 29, 1907.

Lucena, southern Luzon, March 30, 1907.

On the trail from Baguio to the coast at San Fernando it was not abundant. Subtasan and Magallian, ~~March~~ May 19 and 20, 1907.

Sibi and Pili Hot Springs, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, on the Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Few on Fuga Island, P. I., May 29 and 30, 1907.

Abundant on the Naujan River and Lake Naujan, Mindoro, March 25, 1907.

Calapan, Mindoro Island, October 31, 1906.

Subaan, Mindoro, Nov. 2, 1906.

14577, Calapan, Mindoro, Dec. 8, 1906, the only Mindoro specimen.

Specimen: No. 14596. Fad., Corregador Island, off Manila Bay, December 16, 1906.

Abundant at Isabella, Basilan Island, January 26 and 27, 1906.

(Sheet VI.)

Otomela luciionensis (Latham).

On my first visit to Palmas Island, January 21, 1906, none were seen; but, on October 7, 1906, quite a number were seen; and one was shot by General Wood, another by the writer.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.
Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.
Camp No. 3 to Camp No. 4, northwest Basilan, January 30, 1906.
Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906.
Tipo Tipo to Camp No. 8, interior of Basilan Island, Feb. 3, 1906.
Camp No. 8 to La Mitan, north Basilan, February 4, 1906.
Malamani Island, off Basilan Island, February 13, 1906.
Isabella, Basilan Island, February 13, 1906; collected No. 139.
Camp No. 3 to Camp No. 4, Basilan Id., February 16, 1906.
Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.
Malusa, west ~~Mano~~ Basilan, February 19, 1906.
Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.
Musser's plantation, near Isabella, Basilan Id., Feb. 23, 1906.
Abundant on Bucas Island, off northeast Mindanao, October 4, 1906, when 3 were shot.
Lower Cateel River, east Mindanao, October 5, 1906.
Two were noted, on Loran Island (off Ubian Island), October 12, 1906.
Lumbucan Island, October 16, 1906.
One near Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.

(Sheet VII.)

Otomela Cuconensis (Latham).

Normal on Corregidor Island, off Manila Bay, December 16, 1906.
Zamboanga, Mindanao, January 12, 1906.
Julu Island, from Jolo to Maimbun, Bud Dajo,
Crater Lake, and Siet Lake, March 1 and 2, 1906.
, [near site of Dorey's Camp No. 4, January 30-31,
1906] west coast of Basilan Island, March 3, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Colabato, southern Mindanao, March 15, 1906.
Malabang, southern Mindanao, March 15, 1906.
Ayala, western Mindanao, August 27, 1906.
Mariquina Valley, Rizal Province, Luzon, September 17, 1906.
Manila, Pasig, Naylay, and Antipolo, Luzon, September 21, 1906.

386. Hyloterpe philippinensis Walden.
Philippine Thick-head; Yellow-billed Thick-head.
One specimen taken at Pantar doubtfully referred to above.

Hyloterpe aponensis Mearns.
Mount Apo Thick-head.

Hyloterpe philippinensis Walden was seen on the hills back of Isabella, on the island of Basilan, January 19, 1904.
Refer to Harlert's paper on Goodfellow's last Apo collection.
Labas, Libungan Valley, east of Cotabato, March 12, 1904.
Near Isabella, Basilan Island, January 26, 1906.
Camp No. 2 to Camp No. 3, Basilan Island, January 27, 1906.
Cumalarang River to Camp No. 6, interior of Basilan Island, February 1, 1906.
Camp No. 8, north Basilan, February 3, 1906.
Camp No. 8 to La Milan, north Basilan, February 4, 1906.
Camp No. 1 to Camp No. 2, interior of Basilan, Feb. 14, 1906.
Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan I., Feb. 15, 1906.
Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.
Near Malusa, west Basilan, Feb. 19, 1906, specimen No. 13962 was collected.

Hyloterpe aponensis. — My two Mt. Malindang specimens (13 Schroder and 14114) may be considered to be aponensis. No. 13 (Robert Schroder) is quite typical; but No. 14114 may, when a quantity of material has been gathered, come to be

(Sheet II.)

Hylocichla apoensis Mearns.

considered a lowland race of *apoensis* but not of *philippinensis* which is distinct from the forms of Mindanao and Basilan. The lowland form would be distinguished by smaller size, paler and more brownish (i.e. less greenish) back, and paler yellow underparts. Bill smaller.

Sinigmq, July 10, 1904 at 5275 feet on Mt. Apo trail, Mindanao.

Dah-ray'-o (Moros of Lake Lanao).
Pbe'a-oi-toi, Bagobos of Mount Apo, Mindanao.

(Sheet I.)

Peithornis luzoniensis (Gmelin).

I saw one at Baganga, in 1903, but did not shoot the specimen.

On the Agusan River, a short distance above Varicella, Mindanao, I noted "small bird, all dark, size of Junco, long tail, undulating flight, crossed the river", May 7, 1904.

At Magpariian, Ilocos Norte Province, Luzon, I saw a black bird the size of Peithornis, having the attitudes of a Rhipidura, and inhabiting jungles in which were old dead trees and fallen timber mingled with vines. Utters a queer note, and whistles a long, singular ditty. I noted, Feb. 26, that it has a long white mark on the wing, and sings at dusk of evening. Seen, also, at Mariveles, in Bataan Province, Luzon, in August, 1903, where I first heard its very peculiar whistle. I think I have heard it on the Island of Mindanao.

I heard the singular notes of a bird of this genus on Balut Island, of the Sarangani group, off southern Mindanao, January 22.

383. Parus elegans Lesson. Cah-cahK' (Igorrotes of Benguet)
Local: Philippine Titmouse. Cah-cahK'.

I collected this species at Marivelis, in Bataan Province, Luzon, , 1903.

Flocks of the pretty titmice frequent the pine trees of Benguet, uttering notes similar to those of our Regulus satrapa. Abundant around Baguio, Dec. 1-12, 1905.

Summit of Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Mad Road, Benguet Province, Luzon, Dec. 13, 1905.

One on the Sand Ridges, between Laoag and Vintar, Ilocos Norte Province, Luzon, February 7, 1907.

I saw one at the Burdett Antimony Mine, extreme northwest point of Luzon, February 19, 1907; quite one mesoes at Nagpartian, Ilocos Norte Province, Feb. 15 to Mar. 9, 1907. Of the number seen I noted that none had the light back that Mr. (Br. Mus. Catal.) attributes to sex.

Many were seen between Nagpartian and Laoag, Ilocos Norte Province, Luzon, March 9, 1907.

At Height's-in-the-oaks, north of Benguet, Luzon, from 20 to August 3, 1907, it was abundant, [illegible] one of its common notes a cat-like [illegible] those of the cat bird and bluejay.

Baguio, Benguet Province, Luzon, [illegible]

384. Pardalotus ~~[illegible]~~ (~~[illegible]~~).

This species was not uncommon on the high mountain range between Parang and Lake Buliig, Mindanao, October 3 to 5, 1903.

A few were observed in the neighborhood of Paulan, Mindanao, at 2200 feet, in September, 1903.

Noted in the East coast range of Mindanao, in the summer of the divide between the Kayapa and Agusan rivers, ~~eastern~~ May 1, 1904.

Noted on the divide between the Cotcot and Agusan river valleys, eastern Mindanao, May 3, 1904.

Com, and with a large series of Pardalotus elegans elegans from Luzon Island, specimen No. 14115, from Mount Malindang, Mindanao, bears out the characters of mindanensis, which was based on specimens from Mount Apo, Mindanao.

I found this species rare at Camp Paulan (altitude feet), in the interior of Mindanao; and it was collected for Chaplain Joseph Clemens at Camp Keithley (altitude 2200 feet), on Lake Lanao, Mindanao.

On July 5, 1904, I noted it at 7400 feet on Mount Apo, Mindanao.

Sitta [illegible]

Kahl-lee-ling-lee'-ling, Bagobos of Mount Apo, Mindanao.

332. Dendrohaula oenochlamys Sharpe.

[illegible]

Camp No. 1 to Camp No. 2, in terror of [illegible]

The female lacks the supraorbital black stripe. Of the Malindang pair, Nos. 14190, ♀ ad. and 14116, ♂ ad. These two summer specimens differ from 3 Luzon (Baiac Prov.) winter specimens in having a very distinct bluish wash which is not apparent in the 3 Luzon skins in the Bureau of Science collection. The under parts are darker and more reddish in the Malindang skins, which have no blue behind the eye, the brownish extending clear up to the supraorbital black stripe in the male.

Collected at Camp Pittley (altitude 2200 feet), on Lake Lanao, by Chaplain Joseph Clemens, U.S. Army.

On East Bolod Island (sometimes known as Castle Rock), January 10, 1906, I saw a mistletoe, which, on gross, rapid grounds, should be this species.

(Sheet I.)

Callisitta mesolauca (Grant).

Luh-cahf' (Igorotes of Benguet).

Abundant around Baguio, Benguet Province Luzon, December 1 to 12, 1905. The beautiful blue Nuthatch roams through the pine woods in the company of the titmice, Yungipicus, and silvereyes, etc., forming mixed flocks as in the winter woods in the Northeastern United States. They are more superficial in their search for food on the tree bark than our American nuthatches, probably not finding it necessary to make as detailed examination of the whole tree on account of the greater abundance of food; but they climb using the higher limbs in much the same way, uttering a faint, squeaky note which bears but slight resemblance to the notes of our nuthatches.

This Nuthatch has yellowish-white irides; bill and bare space around eye yellow.

Summit of Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Meade Road, Benguet Province, Luzon, Dec.

At Haight's-in-the-oaks, northern Benguet, Luzon, July, 20 to August 7, 1907, it was very abundant, gregarious; its notes quite varied.

(Sheet II.)

(Continued on Sheet).

Very abundant throughout the pine woods in the Bugaud highlands, where I noted it at the hippopotamus pool, January 1, 1907. Virgulaire (Camp at Hor and Bonne, from Dec. 24 to Jan. 4, 1907)

Descending by the Virgulaire trail from Bugaud to Camp Wallace, this species was common throughout the pine forests, which end above Sibloan.

(Sheet 1.)

Callisitta frontalis palawana Hartert.

Callisitta frontalis palawana Hartert, Bull. B.O.C., XVI, No. CXVIII, Nov. 1, 1905, p. 11.

At Melville, Balabak Island, October 16, 1906. I saw two, and collected No. 14440, ♀ ad. Iris yellow. Bill orange-red.

355. Dicaeum ~~[illegible]~~ ~~[illegible]~~.

This species was abundant at Dinagat on the Island of Dinagat, April 21, 1904. It frequented clearings in which bushes had replaced the forest timber

Abundant at Davao, southern Mindanao, July 15 to 20, 1904.

Nativa, Agusan River, Mindanao, May 6 and 7, 1904.

Nativa to Patrocino, Agusan River, Mindanao, May 7, 1904.

Not uncommon at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.

Sarangani Island, off southern Mindanao, January 22, 1906.

Indalla to Camp No. 1, interior of Basilan Island, February 13, 1906, when I collected specimen No. 13950. [illegible]

[illegible]mmon, one shot, lower Cotcot River, E. Mindanao, Oct. 5, 1906.

Pang pang, on Dumanguilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Sigat Bay, off south Mindanao, April 2, 1906.

Bulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

At Davao, Mindanao, June 13, 1904, young of the year were catching insects from the leaves for themselves, and uttering a note like the Eastern Junco.

Tagulaya (sea level) up to 650 feet altitude, on the Tagulaya River, base of Mount Apo, southern Mindanao, June 15, 1904.

[illegible]

A specimen was taken behind the Town of Isabella, on the island of Basilan. The species was noisy and quite numerous in [illegible] [illegible].

Ayala, Mindanao, P. I., April 24, 1906.

Cumalarang River and Camp No. 6, interior of Basilan, [illegible], 1906.

Noted near Camp No. 7 (near Sipac Sipac), in the interior of Basilan Island, February 2, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Is., [illegible], 1906.

Abundant, two shot, at Burongo, Cotubig River, north Dumac, October 1, 1906; Specimens: 14331, 14332, females. These are practically like one from Mt. Malindang, Mindanao.

Collected at Camp Keithley (altitude 2200 feet) by Chaplain Joseph Clemens, U.S. Army.

Zosterops goodfellowi Hartert

Kah-tee'-moag, Bagobos of Mount Apo, Mindanao.

A male from Mount Apo, Mindanao, in the Bureau of Science collection, taken June 18, 1904, is the same size as 11 skins from Mount Malindang, Mindanao, and only differs from all of the 11 in having the crown green instead of gray.

(Sheet 1.)

whiteheadi

Boo'-see-uk (Bagobo of Benguet) or Boos-boos-see-ugh'

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

Abundant in the pine woods around Baguio, Benguet Province, Luzon, Dec. 1 to 12, 1905. Ascends (November 10, 1905) to the summit of Santo Tomas, altitude 7310 feet.

Wagle Road, Benguet Province, Luzon, Dec. [illegible] 1905

Very abundant at Haights-in-the-oak, near Benguet, Luzon, July 20 to August 3, 1907. A sweet-voiced little bird, usually met within flocks flitting rapidly through the treetops.

Dec. 24, 1906 to Jan. 4, 1907. I found it abundant, with pines of the Benguet highlands, from 4000 feet to the summit of Mount Santo Tomas (7 feet).

In descending from Baguio to San Fernando, by the Magellan Trail, Luzon, ~~March~~ June 19, 1907, it was common down to the lower border of the pine zone, above Sublan.

(Sheet II.)

Zosterops whiteheadi vulcani Hartert.

Koh-taá-mōgue, Bagobos of Mount Apo, Mindanao.

I now intended to separate the form of Zosterops whiteheadi vulcani Hartert from Mount Malindang, Mindanao as follows:

Zosterops malindangensis, new species.

Mount Malindang White-eye.

~~Description~~ Type.—No. 14223, Mearns collection. Adult male from the summit of Mount Bliss, Malindang group (altitude about 5750 feet), northwestern Mindanao, Philippine Islands, May 27, 1906.

Description.—Similar to Zosterops vulcani, but smaller. Wing 54 against 55 millimeters; tail 40 against 42; culmen 10.5 against 12. Color somewhat yellower throughout; sides more whitish gray; middle line of belly yellower; chin, throat, and chest brighter yellow.

Note.—Since describing this slight form, I have decided that it is not sufficiently different from vulcani to merit its separation; but compare with the full series from Mt. Apo in the U.S. Nat. Mus.

On July 5, 1904, I noted it on Mt. Apo, Mindanao at 7400 feet and 9000 feet; and, on July 6, 1904, I shot one on the summit.

(Sheet I.)

Zosterops whiteheadi vulcani Hartert.

Kah-taá-mogue, Bagobos of Mount Apo, Mindanao.

Two specimens from Mount Malindang, Mindanao, are practically like two from Mount Apo, Mindanao.

Chaplain Joseph Clemens, U.S. Army, collected it at Camp Keithley (altitude 2200 feet), on Lake Lanao, Mindanao.

Zosterops batanis McGregor. (Sheet I.)

Zosterops batanis McGregor, Philippine Journal of Science, II, October, 1907, p. 343.

Common in low bushes along streams in the vicinity of Santo Domingo de Basco, Batan Island, P. I., May 27, 1907. As it flits about it resembles the Summer Yellowbird (Dendroica aestiva) in appearance and habits.

Zosterops halconensis Mearns
Mount Halcon Silver-eye.

Zosterops halconensis Mearns, Philippine Journal of Science, II, October, 1907, p. 360.

Quite common at Camp No. 5, altitude 4500 feet, on a spur of Mount Halcon, Mindoro, Nov. 13–17, 1906; thence to Camp No. 6 (6300 feet) it became more numerous Nov. 17–22, 1906; also from Camp No. 6 (6300 feet) up to Camp No. 7, altitude 8000 feet, Nov. 21 and 23, 1906; also from Camp No. 7 to summit of Mount Halcon, altitude 9000 feet, November 22, 1903

In descending Mount Halcon, Mindoro, it was abundant at the Mangyan house, altitude 3000 feet, between camps 4 and 5, November 26–28, 1906.

Specimens collected, in Mindoro, at:–

No. 14480 ♂ad. Camp No. 5, altitude 4500 feet. Nov. 14, 1906.
" 14481 ♀ad. do do

(Sheet II.)

Dicaeum japonense (Gmelin).
Red-bellied Flower-pecker.

Noted on the Dubay River, northern Mindanao, April 22-24, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.

(Sheet I.)

Dicaeum retrocinctum Gould.

Specimen: No. 14519 ♂ ad., Camp No. 9, altitude feet, at the point where we left the Ataq River, Mindanao, December 1, 1904

(Sheet 1.)

Dicaeum hæmatostictum Sharpe.

Camp Possman, Luzon, December 24, 1905.
In bamboo.

?365. Dicaeum hypoleucum Sharpe

Black-and-white Flower-Pecker.

A species, apparently this, was seen at Jolo and other places on the island of Sulu, P.I., [illegible]

Camp No. 2 to Camp No. 3, Basilan Island, west of Isabella, January 29, 1906.

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906.

Camp No. 5 to the Lumalarang River, interior of Basilan, Feb. 1, 1906.

Camp No. 6 to Camp No. 7 (near Tipo-Tipo), in the interior of Basilan Island, February 3, 1906.

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Camp No. 7 to Camp No. 8, Basilan Island, Feb. 20, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

[near site of Dorsey's Camp No. 4, Jan. 30-31, 1906] west coast of Basilan Island, March 3, 1906.

221 (Sheet I.)

362. *Dicaeum cinereigulare* Sharpe.

[illegible] HIDUGA-[illegible]

Davao, southern Mindanao, July 18 to 20, 1904.

[illegible] 19

[illegible]

Noted as the "Pauler Short-tail," [illegible]

Noted at Cottabato, southern Mindanao, March 3 to 5, 1904, a species of *Dicaeum* similar to *fuliginosum*; also at Kudarangan, further up the Rio Grande (same as specimen No. 13399).

Dicaeum [illegible]

[illegible]

Noted on the Buluan River, between lakes Buluan and Liguasan, May 21, 1904.

Noted at Lubay, northern Mindanao, April 22, 1904.

[illegible]

Noted at Paular, in August and September, 1903.

Prangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904.

Upper Libungan River, east of Cotabato, March 12, 1904.

Noted on the Tulung River, northeastern Mindanao, April 22-24, 1904.

[Not seen in the collection from Benguet, Luzon, but met with, in abundance, soon after passing Cecil's place, on the way to Sagada. This is Dicaeum pygmaeum.]

Chaplain Clemens collected it at Camp Keithley, on Lake Lanao, Mindanao, altitude 2200 feet

Davao, southern Mindanao, July 15 to 20, 1904.

(Sheet I.)

Dicaeum pygmaeum (Kittlitz).

Pygmy Flowerpecker.

Left in the Bureau of Science: Nos. 14943, 14948, 14931, and 14714.

Cadizan, Ilocos Norte Province, Luzon, January [illegible]

Two were noted in a grove of low trees near the Laoag River a short distance below Laoag, January 19, 1907. Its notes were like a Titmouse's.

Bojeador lighthouse, Ilocos Norte Province, Luzon, Febr. [illegible]

Common at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907. Often in thickets bordering trails, again in tall trees in the forest or along streams.

Common from Nagpartian to Laoag, Ilocos Norte, March 9, 1907.

A few were seen on the trail from Tofidis to [illegible], Benguet Province, Luzon, August [illegible], 1907.

Not seen as higher up the east side of northern Benguet, Luzon, but met with, in descending to Baguio, soon after passing Cosi's place, on August 4, [illegible] A few pairs or small bands were seen in the oak woods about Haights [illegible]

Sublaan to the Nagilliran River, Luzon, ~~March~~ May [illegible], 1907.

Pili Hot Springs, near Sibi, southeastern Luzon, June [illegible]

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June [illegible]

A few on Huga Island, P. I., May 29 and 30, [illegible]

(Sheet 1.)

Dicaeum everetti Tweeddale.

An immature specimen (No. 14345), shot at Borongan, east Samar, Oct. 3, 1906, is referred to this.

Dicaeum everetti Tweeddale. } Two specimens of these
Dicaeum mindanense Tweeddale. } species before me, No. 14150, an adult, from Mount Malindang, Mindanao, and No. 14345, young, from Samar, are difficult to indentify. These two species are so nearly of one size, and the descriptions so close, that I cannot identify them positively. The adult from Mt. Malindang I provisionally call Dicaeum mindanense, although it closely resembles the plate figure and description of Tweeddale's D. everetti.

No. 14354, young, from Samar, I call D. everetti because it is slightly different from the Mindanao specimen, D. everetti having been found in Samar and not in Mindanao.

(Sheet 1.)

Dicaeum

~~Pect~~ Pay-pit', Moros of Basilan Island.

Specimens: No. 13914 and 13915, Isabella, Basilan, Jan. 27, 1906.

Abundant near Isabella, Basilan Island, January 27, 1906, when numerous lively twittering little flocks were seen flying from tree to tree on partly open hillsides where there were grassy areas between the trees.

Camp No. 1 to Camp No. 2, west of Isabella, Basilan Island, January 28, 1906.

Dicaeum (specimen same as Nos. 13914 and 13915) was shot on the River (where I shot "Monkey" No. 6031), January 31, 1906; but the specimen was not preserved.

Dicaeum (species the same as Nos. 13914-15), noted from Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906; one shot. Buli Buli River to Camp No. 5, south Basilan, February 17, 1906. Near Malusa, west Basilan, Feb. 19, 1906, specimen No. 13963 was collected. Camp No. 7 to Camp No. 8, Basilan Island, Feb. 20, 1906. Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906. No. 13983, ♂ad. was shot in the yard of Mr. Henry Musser's residence, 2 miles west of Isabella, Basilan Id., Feb. 22, 1906.

Mamuk & Manka Island, January 6, 1906 (compare specimens).

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Dit Lake, March 1 and 2, 1906.

(Sheet I.)

Dicaeum nigrilore Hartert

Tahr-ig-tee'-gon, Bagobos of Mount Apo, Mindanao.

Two specimens from Mount Malindang, northwest Mindanao, appear to be identical with a Mount Apo topotype in the Bureau of Science collection.

(Sheet I.)

Olive Thick-billed Flower-Pecker.

Prionochilus olivaceus Tweeddale.

Noted at Pantar, Mindanao, August, Sept., 1903.

Noted near Matalung Falls, Mindanao, March 31, 1904.

Noted at Tubay, northern Mindanao, April 22, 1904.

(Sheet 11.)

Poiomochilus olivaceus Sharpe.

Noted as abundant on the Tubay River, northern Mindanao, April 22-24, 1904.

Dativa, Agusan River, Mindanao, May 6 and 7, 1904.

Native to Patrocinio, Agusan River, Mindanao, May 7, 1904.

Near Isabella, Basilan Island, January 25, [illegible]

Camp No. 1 to Camp No. 2, west of Isabella, Basilan Island, January [illegible]

Camp No. 1 to Camp No. 2, interior of Basilan Is., Feb. [illegible], 190[illegible].

(Sheet I.)

Prionochilus inexpectatus Hartert.

Several on treetops at Camp No. 5, altitude 4500 feet, on a spur of Mount Halcon, Mindoro, Nov. 13-17, 1906.

Three Mindoro specimens, 2 females and 1 male differ from Luzon specimens in the Bureau of Science collection in being somewhat smaller, with quite appreciably smaller bills.

Specimens collected, in Mindoro, at:—

14462. ♀ad. Camp No. 3, altitude 2250 feet. Nov. 9, 1906. Iris reddish brown. Bill and feet black.

14493. ♀ad. Camp No. 5, altitude 4500 feet, Nov. 16, 1906. Iris red-brown. Bill olive-black, yellow at base of mandible and on sides of maxilla at base. Feet olive-plumbeous, yellowish on soles. Measurements: 90; 164; 51; 27; 7.6; 14.5; 12.5 millimeters.

14516. ♀ad. Camp No. 9, altitude . feet, at foot of hill where we left the Celing River, Mindoro, Dec. 1, 1906.

Alcedinidæ.

341. ~~Ceyx~~ Cinnyris sperata (Linnæus).

Red-breasted Sun-bird.

Tagalog: Pay'-att

Abundant at Bacuag, northeastern Mindanao, April 21, 1904. Two shot. (Here first met with by me.) The Boholano natives of Bacuag (migrants) call it Tahm'-see, and so do the Visayans of Bacuag. (Three-fourths of the inhabitants of Bacuag are Boholanos, the remainder Visayans & mixed.)

Noted at Surigao, northeastern Mindanao, April 21, 1904.

" " Tubay, " " " 22, "

Noted on the Tubay River from Jabonga to Tubay, April 22-24, 1904. Abundant in cocoanut trees at Jabonga.

Two were shot at Jabonga, on Lake Mainit, northeastern Mindanao, April 24, 1904.

~~One was shot at Jabonga, on Lake Mainit, northeastern Mindanao, April 24, 1904.~~ Common on the lower Tubay Valley, northern Mindanao, April 22 and 24, 1904.

Cde's hemp plantation, 7 miles west of Bagauga, eastern Mindanao, April 27, 1904.

Abundant at Jatira, on the Agusan River, Mindanao, May 6, 1904; not seen above Jatira.

Cinnyris sperata (Linnaeus).

Jativa to Pabrocino, Agusan River, Mindanao, May 7, 1904.
Variella, on the Agusan River, Mindanao, May 7 and 8, 19[illegible]
Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904.
Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11.
Dinginig, at mouth of Agusan River, Mindanao, May [illegible]

In cocoanut trees up to 1000 feet on the base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.
Tiliket Springs, near Tibi, southeastern Luzon, [illegible]

Many seen and one specimen collected on Balut Island, Darangani group, January 2[illegible]
Isabella, Basilan Island, January 26, 19[illegible]
Camp No. 1 to Camp No. 2, west of Isabella Basilan Island, January 29, [illegible]

Abundant in cocoa-~~nut~~ nut palms, on Bucas Island, October 4, 1906, when Dr. Paul C. Freer shot Nos. 14359 and 14360, males.

I saw on flock at Melville, Balabac Island, October 16, 1903, when specimen No. 14443, ♂ ad., was collected

October males (2) from Bucas Island, east of Samagat Island, have the head greener (less coppery) than a male from Balabac Island; the mantle is much darker reddish brown; and the red of the abdomen is lighter. Luzon and Mindoro specimens of sperata are more like the Balabac than the Bucas specimens. Material for comparisons scanty.

{ Cinnyris jugularis (Linnaeus).
Cinnyris dinagatensis Mearns.
Cinnyris aurora (Tweeddale).

~~not~~ a case of the intergradation of two forms through islands geographical intermediate. The form is evidently distinct. I have examined the large series of C. dinagatensis from the island of Bohol and find no evidence of intergradation with C. aurora or C. jugularis, and the same is true of all the specimens seen from Bucas and Dinagat islands. It is true, however that the form is intermediate in its characters.

(Sheet III.)

Tahm'-ee, Visayan Filipinos of Mindanao.

Cranopis speciosa (Linnaeus).

Camiguin Island, west coast of Samar Island, December 5, 1906.

Governor Bolton shot specimen No. 13507, ♂ ad., 100 feet above the Bagobo village of Toomcahling on Mount Apo, Mindanao, June 15, 1904.

Abundant on Talicud Island in the Gulf of Davao, off southern Mindanao, July 17, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

Cinnyris whiteheadi Grant.

Critical notes. — Two females from Fuga Island, May 30, 1907, have smaller bills than those of five females from Calayan Island; this difference, amounting, in the length measurement, to 1 millimeter. In color they are alike.

Two adult males from Casiguran, on the east coast of Luzon, differ from a large series of adult males collected on Calayan Island by Mr. Richard C. McGregor in having the crissum yellow-green instead of black, the feathers faintly edged with yellow green in Calayan skins. Top of head with gold and violet instead of (principally) green reflections. Rump and upper tail-coverts all metallic green instead of violet-purple.

A skin from Jala Jala, Rizal Province, Luzon, agrees with the pair from Casiguran, east coast of Luzon.

The bill of males from Calayan Island averages 16 mm. in length (chord) of culmen; that of Casiguran, Luzon, skins averaging only 14 mm.

The Calayan Island form is undescribed. Mr. William Dorr Carpenter shot two immature females on Fuga Island, P. I., May 30, 1907.

227-a (Sheet I.)

Cinnyris whiteheadi Grant.

Several were seen feeding with Zosterornis whiteheadi, at 6000 feet on Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905. Extreme N.W. point of Luzon, Ilocos Norte Province, Feb. 19, 1907.

In the vicinity of Nagpartian, this beautiful sunbird was exceedingly abundant from February 15 to March 9, 1907; but, as this was the molting season I only took skins. It utters a twittering note, and frequents certain flowering trees and vines, about which scores may be found at any time. It flutters like humming birds before the flowers, but only for a moment, and often alights. These fluttering flocks, feeding in the sunshine, are very beautiful.

Noted at Dulaan, Luzon, ~~[illegible]~~ May 19, 1907. Abundant in cocoa-nut trees, at sea level, at Casiguran, east coast of Luzon, [illegible] Baler, east coast of Luzon, [illegible]

(Sheet I.)

Cimmyris juliae Tweeddale.

Abundant, January 31, 1906, between Camp No. 4 and Camp No. 5, northwest Basilan.

Camp No. 5 to the Cumalarang River, interior of Basilan, February 1, 1906.

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906.

Camp No. 5 to Camp No. 6, north Basilan, February 18, 1906.

Camp No. 8, Basilan Island, Feb. 20, 1906; Nos. 13968-68

Camp No. 8 to Camp No. 9 (Musser's plantation, 2 miles west of Isabella), north Basilan, Feb. 21, 1906. Specimens: 13973 + 13974

Musser's plantation, near Isabella, Basilan Is., Feb. 22, 1906.

, [near site of Dorsey's Camp No. 4, Jan. 30-31, 1906] west coast of Basilan Island, March 3, 1906.

(Sheet I.)

Cynopis jugularis (Linnæus).
Cynopis dinagatensis Mearns.
Cynopis aurora (Swoddale).

~~The islands of the Philippine Archipelago may be compared to the letter A. The west or narrow side of the letter A, from the Calamianes to Balabac, are ~~the~~ occupied by Cynopis aurora; the right or shaded side, excepting the islands of Bucas, Dinagat, Leyte, and Bohol, which lie between the middle and lower thirds, and the chain of islands forming the base of the letter A are inhabited by Cynopis jugularis; and ~~the~~ Cynopis dinagatensis~~

The islands of the Philippine Archipelago are in the form of a triangle, open at the southwest and enclosing the Sulu Sea. The narrow chain of islands forming the western side, from the Calamianes to Balabac, are occupied by Cynopis ~~g~~ aurora. The eastern side and base, from ~~the~~ Luzon (and a few small islands north of it), ~~from~~ to Sibutu (and extreme southwestern islands of the group) are occupied by Cynopis jugularis, with the exception of the islands of Bucas, Dinagat, Leyte, and Bohol, which interrupt its range on the east side of the triangle, and are occupied by Cynopis dinagatensis, whose range on both north and south is in close contact with islands occupied by typical C. jugularis, but is separated from the range of C. aurora on the west by three of the largest islands, Cebu, Negros and Panay. It is not therefore

(Continuous)

343. ~~Crinigeris~~ jugularis (Linnaeus).

[illegible] Yellow-breasted [illegible].

Cab'n-see (Visayan Filipinos of Mariay, [illegible]

Tahm'-see (Moros and Filipinos of [illegible]

It-it (Moros of Buluan Island).

[illegible] Moros [illegible]

[illegible] 1903, [illegible] Mindanao, [illegible]

Noted at Mariay, southeastern Mindanao, [illegible]

A male was shot at Davao, southern Mindanao, [illegible]

On the Island of Sulu, November 12-16, 1903, this species was noted as follows: From Hassana to Mt. [illegible] island, [illegible]; along the beach from Tagbilaran to Jolo, [illegible]

Abundant at Jolo, Sulu, November 21-26, 1903; usually seen in cocoanut-palms.

Zamboanga, Mindanao, P. I., December 2, 1903.

Noted at San Sofia, a Spanish fort at Margossatubig, on Dumanquilas Bay, southern Mindanao, January ~~29~~ 30, 1904.

Noted at Bung Bung, southern Mindanao, January 30, 1904.

" " Buluan, " " " 31, "

Abundant at Sali's Hasim's residence and on the last six miles of the Cabasaran River, January 31, 1904.

Abundant, feeding in trees bearing large red flowers on the island of Buluan, off southern Mindanao February 1, 1904.

343. Cinnyris jugularis (Linnaeus).

Numerous on Banga Island (Port Banga) off southern Mindanao, February 1, 1904.

Found at Sambegan, Sambegan Bay, southern Mindanao, February 1 and 2, 1904.

At Dipulog, no. Mindanao, P. I., February 14, 1904, these Sunbirds were common in cocoanut trees.

A "Sunbird like No. 13231" was noted at Lubungan, northern Mindanao, P. I., February 14, 1904.

I saw a female feeding her young in the thatch of a nipa house at Iligan, northern Mindanao, February 15, 1904.

Numerous, in cocoanut trees at the Pollok Naval Station, southern Mindanao, P. I., March 2, 1904.

Noted at Cottabato, southern Mindanao, March 3-5, 1904.

" " Kudarangan, " " " 6, "

April 5, 1904, I heard a song resembling that of this species, but did not see the bird. Tarca River, near Zamboanga.

The Powell boys brought me the nest of this bird at Zamboanga, April 12, 1904.

Noted at Isabella, Basilan, January 19, 1904.

Numerous on the Buluan River, connecting lakes Buluan and Liguasan, Mindanao, May 20, 1904.

It was especially abundant near Buluan, where cocoa-nut-trees were abundant. I have seldom seen this species far from cocoanut groves.

Cinnyris jugularis (Linnaeus).

Philippine Yellow-breasted Sunbird.

Noted on the Buluan River, between the Moro village of Buluan and Lake Buluan, May 23, 1904. Its nests were purse-shaped, hanging from the bamboo quite close to the water; and, when descending the Buluan River, May 27, 1904, it was observed as far down as Pandog.

Abundant at Surigao, northeastern Mindanao, April 20 and 21, 1904.

Abundant at Bacuag, northeastern Mindanao, April 21, 1904.

" " Tubay, " " " 22. "

" " Zamboanga, western " July 24 to Aug. 1, 1904.

" " Davao, southern Mindanao, July 15 to 29, 1904.

" " Jolo, Sulu, P. I., March 26, 1906.

Malanipa Id., off N.W. Mindanao, April 1, 1906.

Magosa Tubig, S. Mindanao, April 2, 1906.

Always abundant at Zamboanga.

Very numerous on Little Santa Cruz Island, off N.W. Mindanao, April 11, 1906.

Ayala, Mindanao, P. I. April 24, 1906.

Cabas, Libungan Valley, east of Cotabato, March 12, 1904.

Pikiringan River to Schuranaya, March 13, 1904.

Piangs to Barak, Rio Grande Valley, Mindanao, March 7-11, 1904. Koranaya Fort, March 11-13, 1904.

Rio Grande from mouth of Agranaya estero to Cotabato, March 14, 1904. Zamboanga March 15, 1904.

(Sheet IV.)

Cinnyris jugularis (Linnaeus).

Abundant at Lake Mainit and along the Tubay River, northern Mindanao, April 22-24, 1904. One was shot at Jabanga, on Lake Mainit April 24, 1904.

Baganga to Christian Cide's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 3[illegible], 1904.

Abundant at Jaliva, on the Agusan River, Mind., May 6, 1904; not seen above Jaliva, on the Agusan.

Jativa to Patrocinio, Agusan River, Mindanao, May 7, 1904.

Varicella, on the Agusan River, Mindanao, May 7 and 8, 1904.

Varicella to Lake Linao, Agusan Valley, Mindanao, May [illegible], 1904.

Lake Linao to Talacogon, Agusan Valley, Mindanao, [illegible]

Talacogon to Butuan, Agusan Valley, Mindanao, May 10, [illegible]

Singing, at mouth of Agusan River, Mindanao, [illegible]

Simangan, northern Mindanao, May 12, 1904.

Lingayan, northern Mindanao, May 13, 1904.

Baliangao, Murcialagos Bay, N. Mindanao, May 13, 1904.

San Pedro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Stotsenburg, " " " 28, "

Camp Gregg, Pangasinan Province, " " " 29, "

Dagupan, " " " " 30, "

Pozorrubio, " " " " 30, "

Pozorrubio to Dagupan, in cocoa-nut palms, Dec.

A Cinnyris, supposed to be this species was abundant on Sanmi Island, Sulu Sea, January 4, 1906. One specimen of young male collected (No. [illegible])

Cinnyris jugularis (Linnaeus).

Abundant on three small wooded islands off the south end of Dibutu Island, January 5, 1906.

Paoay River near its mouth, Ilocos Norte Province, Luzon, January 16, 1907.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Padsan, Ilocos Norte Province, Luzon, January [illegible]

Dingras to Paoay do " 18.

A few were resident in the city of Laoag (population about 50,000). (Noted January 20, 1907.)

Common in the Laoag Valley below Laoag, January 20–22, 1907.

Vintar Lake, Ilocos Norte Province, Luzon, January 24, 1907.

Paoay " do " 27.

Abundant everywhere between Laoag and Paoay Lake, February 5, 1907.

One pair on the Pagut Ridges, between Laoag and Vintar, " 7.

Common from Laoag to Nagpartian, Ilocos Norte Pr., " 15.

Abundant at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.

" from " to Laoag, do, March 9, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June [illegible]

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Abundant on the Naujan River and Lake Naujan Mindoro, March 25, 1907.

Specimen: No. 14575 Ead.; Calapan, Mindoro, Dec. 8, 1906.

Sarangani Island, off southern Mindanao, January 23, 1906.

Pō-peet; Moro of Basilan. (Sheet VII.)

Cinnyris jugularis (Linnaeus).

Balut Island, Sarangani group, January 23, 1906.

Isabella, Basilan Island, January 26 and 27, 1906

Camp No. 1 to Camp No. 2, west of Isabella, Basilan Island, January 28, 1906

Camp No. 3 to Camp No. 4, northwest Basilan, January 31, 1906.

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906; one shot on the River, where I shot Monkey No. 6031.

Camp No. 5 to the Cumalarang River, interior of Basilan, Feb. 1, 1906

Camp No. 8 to La Milan, north Basilan, February 4, 1906

Isabella, Basilan Island, February 13, 1906; collected No. 13949, ♀ ad.

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906.

Camp No. 5 to Camp No. 6, south Basilan, Feb. 18, 1906

Malusa, west Basilan, February 19, 1906

Camp No. 8, northwest Basilan, February 20, 1906

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906

Musser's plantation, near Isabella, Basilan Isl., Feb. 23, 1906

Estrellus, a Filipino of Zamboanga calls it Tukmi ng Ilocos.

In cocoa-nut groves at Borongan, east Samar, Oct. 3, 1906.

In cocoa-nut palms at Lauang, east Samar, Oct. 3, 1906.

Cateel and lower Cateel River, east Mindanao, October 5, 1906; one shot.

Manay, east Mindanao, October 6, 1906.

Siasi Island, October 12, 1906; common.

On October 13, 1906, General Wood saw black-throated sunbirds on Jeminda~~o~~ Island (off Pitanki Island), which may have been this species or Cinnyris aurora.

Cinnyris jugularis (Linnæus).

Mamuk Manka Island, off Tawi Tawi, January 6, 1906.
Tatan, Tawi Tawi Island, January 8, 1906.
Pair on Simaine Island, off Tawi Tawi Island, January 8, 1906.
Abundant at Diatu, Jeasi Island, January 9, 1906.
Jolo, Sulu Island, January 9, 1906.
Many seen, and a specimen collected, on Bolick Bolick Island, west of Basilan Island, January 10, 1906.
Zamboanga, Mindanao, January 12, 1906.
Walled city of Jolo, Sulu Island, March 1, 1906.
Sulu Island, from Jolo to Maimbung, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Cotabato, southern Mindanao, March 15, 1906.
Malabang, southern Mindanao, March 15, 1906.
Pangpang, on Dumanguilas Bay, southern Mindanao, August 17, 1906.
Cebu Island, Igat Bay, off south Mindanao, April 2, 1906.
Agata, western Mindanao, August 27, 1906.
Several pairs on the Maclan Island, off Cebu, September 2, 1906.
Camp Connell, west coast of Samar Island, September 5, 1906.
Sulug, eastshore of Davao Gulf, southern Mindanao, June 12, 1904.
At Davao, southern Mindanao, June 13, 1904, its song seemed to me not unlike that of our Chestnut-sided Warbler.

Cimnypis aurora (Swinhoe).

On Cuyo Island, Sulu Sea, September 10, 1906, it was very abundant, especially in groves of cocoa-nut palms.
Puerto-Princesa, east Palawan, September 11, 1906.
Leper colony, Calamian Island, September 13, 1906.

(Sheet VIII)

Cinnyris jugularis (Linnaeus).

Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.
Abundant on Talicud Island, Davao Gulf, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.
Cotabato, southern Mindanao, July 23, 1904.
?Dulug, east coast of Leyte, July 25, 1906 (as no specimens were shot, it is probable that this may have been Cinnyris dimagatensis.

Cinnyris (Cyrtostomus) dinagatensis (Mearns).

Dinagat Orange-breasted Sun-bird.

At Dinagat, on the Island of Dinagat, April 21, 1904, I discovered this species ~~The species~~ was abundant, and flew actively about, after a heavy shower, singing a lively and sweet song in the air and also in trees at the borders of a clearing. A seeming difference in its song led me to suppose that it was different from C. jugularis, and, on shooting an adult male, the truth of this supposition was confirmed.

Very abundant on Bucas Island, off northeast Mindanao, October 4, 1906, when 4 were shot by Captain Halstead Dovey and Dr. Paul C. Freer shot specimens 14361-3. These 3 skins are typical dinagatensis. Compared with a large series of jugularis from Luzon and Mindanao, no intermediates are found. In addition to the orange mark on the chest, males of this species differs from jugularis in having the under parts as a whole of a much more intense yellow. There is also a stronger tendency to black metallic spotting on top of head. The female, on the other hand is if anything slightly paler than jugularis. Robut specimens collected in large series by Mr McGregor, are typical dinagatensis and do not intergrade with either jugularis or aurora.

(Sheet I.)

Cimex guimarasensis Steere.

Camp Posoman, Guimaras, December 2[illegible], 1[illegible]

(Sheet I.)

Arachnoitera [illegible]

Philippine Naked-checked [illegible] - [illegible]

Seen on the last six miles of the Cabasaran River, southern Mindanao, January 31, 1904.

[illegible]

Noted at Isabella, Basilan, January 19, 1904.

Quite numerous at Tubay, northern Mindanao, April 22, 1904, when I shot two of them. (Also seen at a camp up the Tubay River, near Santiago, April 23, 1904

Noted between Ade's plantation and the River, eastern Mindanao, April 27, 1904.

(Sheet I.)

Anthreptes

351. ~~Anthreptes~~ chlorigaster Sharpe.

~~Sharpe's~~ Brown-throated Sun-Bird.

Pō-pect, Moros of Basilan Island.

Musser's plantation, near Isabella, Basilan Id., Feb. 22, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

I have taken this beautiful species at the island of Tolicud in the Gulf of Davao, and on the islands of Sulu and Cagayan Sulu [illegible].

This gorgeous Sunbird was abundant in the cocoanut groves around Jolo, on the island of Sulu November 21–26, 1903 [illegible].

In the hospital yard at Zamboanga, Mindanao, P. I., December 2, 1903, I saw what appeared to be a male of this species. Though seen many times, later, I never felt quite certain of its identity.

Common on the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904. It was most numerous in cocoanut trees near the shore (No. 13370); but one (No. 13376) was shot on the top of a mountain [Anthreptes [illegible]].

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906; one (No. 13929) shot on the [illegible] River, where I shot a [illegible], Camp No. 5, and Lamalarang River in the interior, Basilan Island, February 1, 1906.

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.

Dicrurus [illegible]

Dicrurus [illegible]

At Zamboanga, eastern Mindanao, P.I., on October 22, 1903, I noted a "small black bird the size of a Robin", which may have been this bird or, possibly, the "Black Thrush" of Mt. Apo. It uttered "a peculiar note."

Seen on the west side of Lake Lanao, Mind., Nov. 2, 1903.

One shot, February 16, 1904, at the Subano village of Mucas, on Sarangani Bay, northern Mindanao.

[illegible]

Noted at Camp Vicars (3000 ft.), Mindanao, [illegible]

Noted from Camp Vicars to Sonir, on L. Lanao, Mindanao, April 2, 1904.

" " Sonir, on L. Lanao, to Rogayan, via the Tawan Valley, Mind., April 3, 1904.

Noted near Isabella, Basilan, January 19, 1904.

Noted between Pantar and Marahui, Mindanao, Sept. 27, 1903.

Always common around about Zamboanga.

Examine specimens collected to see if any is Dicrurus balicassius.

Abundant from Dranaya Marsh to Talaz, Tibungan Valley, east of Cotabato, March 12 and 13, 1904.

Lake Mainit, northern Mindanao, April 24, 1904.

Tubay River, northern Mindanao, April 22–24, 1904.

Bacoor River, a tributary of the Agusan, eastern Mindanao, May 4, 1904.

Lake Lanao to Talacogon, Agusan valley, Mindanao, May 9, 1904.

(Sheet 4.)

Manoke manoke, que'ia; Moros of Basilan.

Dicrurus striatus Tweeddale.

Near Isabella, Basilan Island, January 26 and 27, 1906.
Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.
Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906.
Cumalarang River to Camp No. 6, interior of Basilan, February 1, 1906.
Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.
Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.
Jumahobing River, south Basilan, February 16, 1906.
Near Maluso, west Basilan, February 19, 1906.
Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.
Musser's Plantation, near Isabella, Basilan Id., Feb. 22, 1906.
Panoyang, on Dumanquilas Bay, southern Mindanao, August 1, 1906.
Camp Overton, northern Mindanao, July 9, 1906.

(Sheet I.)

Dicrurus balicassius (Linnaeus).

Drongo.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905. Lieutenant Charles M. Maigne afterwards made a handsome water-colour sketch of this drongo at Camp Greg.

Camp Hotsenburg, Luzon, Nov. 28, 1905.

Base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

Casiguran, east coast of Luzon, [illegible]

Baler, east coast of Luzon. [illegible]

Abundant on Mount Mayon, on the side next to the town of Tobaco, Albay Province, Luzon, June 4 and 5, 1907, ranging up to [illegible]

Subaan to the Benibi River, eastern Mindoro, Nov. 5.

Benibi River, Mindoro, November 3 and 4, 1906.

Alag River, Mindoro, Nov. 5–8, 1906.

Quite numerous in a clearing made by the Mangyan tribe, on a spur of Mt. Halcon, extending from 3000 to 3300 feet altitude, November 12 and 13 and 26–28, 1906; one shot.

One at 3000 feet, on a spur of Mount Halcon below Camp No. 5, November 13, 1906.

Buena Vista Hill, Camp No. , altitude feet, Mindoro, December 4 and 5, 1906; utters a pretty whistle.

(Sheet II.)

Dicrurus balicassius (Linnæus).

Specimens collected, in Mindoro, at:—

14476. ♀ ad. Camp No. 8, altitude 3000 feet, Nov. 13, 1906.
14514. ♂ ad. do " 30, " .
14528. ♀ ad. Camp No. 12, altitude feet, Buena Vista H. (~~[illegible]~~) Dec. 4, " .
14534. ♀ ad. Lubacan, Mindoro. " 5, " .

Dicaeum [illegible] H. & A.

298. Chibia borneensis Sharpe.

I saw this only, on the islands of Sulu and Cagayan Sulu.

On the island of Sulu, P. I., November 12 to 26, 1903, this species was seen as follows: At the residence of the Panglima, Hassan, November [illegible] common at Jolo, November 2[illegible]

Several were seen on the island of Sulu, P. I., along the trail connecting Delta (?) Upa's residence ~~with his~~ 3½ miles inland with his market at Bual on the sea, February 21, 1904.

On February 26, 1904, I saw several pairs on the island of Cagayan Sulu, in the Sulu Sea. Some were in the woods, others in a cocoanut grove. One specimen (No. 13385).

On Sulu Island, between Jolo and Bud Dajo, Oct. 11, 1906.

Two were noted on Cagayan Sulu Island, October 15, 1906.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

(Sheet I.)

Chibia cuyensis McGregor.

Quite common, 28 specimens taken, on Cuyo Island, Sulu Sea, September 10, 1906; has a very sweet note.

240 & 241

{ Motacilla melanope Pallas. and Sheet I.
{ Budytes flavus leucostriatus (Homeyer).
(No. 13390 ♂ ad.)

I shot one Wagtail and saw two others slightly flitting along the rocky shore of the island of Cagayan Sulu, in the Sulu Sea, February 25, 1904.

At a large fresh-water pond on the south side of the island, Captain Langhorne shot another species (?), (No. 13367 ♀). [Examine specimens.]

Budytes flavus leucostriatus was noted at Surigao, northeastern Mindanao, April 20, 1904.

A couple of Wagtails resembling Motacilla boarula melanope was seen at Manila, September 30, 1905.

Wagtails frequented the Manila moat, outside the city wall, stalking over the mud and into shallow water exactly as Sand pipers do. They were abundant during October and November, 1905.

During 1st week of April, 1906, it became very abundant in the port of Zamboanga.

All below are leucostriatus.

Abundant at Zamboanga, April 11, 1906 - leucostriatus

Deranaya Marsh to Labas, Libungan Valley, east of Cotabato, March 12 and 13, 1904

Parak and Deranaya, Rio Grande Valley, Mindanao, March 10-12, 1904

Motacilla boarula [illegible] melanope.

[illegible] Wagtail.

Sulung ko-it-kon-it [illegible]

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

A number of large "yellow" Wagtails were seen in the wagon-road between Malabang and Camp Vicars (altitude 2800 feet), Mindanao, November 1, 1903.

Numerous at Camp Vicars and along the western shore of Lake Lanao, November 2, 1903.

No Wagtail was found at Cotabato, March 3-5, 1905.

Wagtails, apparently this species, flew ahead of us along the road from Malabang to Camp Vicars, Mindanao, [illegible]

"Large Wagtail" was noted in numbers on the lowest part of Taraca River, Lake Lanao Basin, April 5 to 9, 1904. Some may have been this species.

Several were seen along the wagon-road from Pantar to Marahui, Mindanao, September 27, 1903. On the following day many were seen on rocks bordering Lake Lanao; also noted at Camp Vicars (altitude about 2900 feet), September 28 and 29, 1903. A few of these larger Wagtails frequented the wagon-road from Camp Vicars to Matalang Falls, continually flying on before us, after alighting and fluttering in the dust. [illegible], Sept. 29, [illegible]

Motacilla boarula melanope Pallas.

Lake Mainit, northern Mindanao, April 24, 1904.

Between Jabonga, on Lake Mainit, and Danliego, on the Tubay River, I noted: "Two species of Waglails were lively elements of the bird scenery along this part of the river." Also: "Abundant everywhere" on Lake Mainit and the Tubay River, April 22-24, 1904.

In streams from Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, E. Mindanao, April 26, 1904.

From Ade's plantation west to the River, eastern Mindanao, April 27, 1904.

On April 29, 1904, a few were seen on rocks of Baganga River; and, higher up the Baganga, on April 30, the species became more abundant.

Many were seen on the stones of the broad Cateel River, eastern Mindanao, May 2, 1904, above the Mandayan village of Cateel; also at Cataragan on the upper Cateel River, May 2 and 3, 1904; and on the head of the Cateel in the Coast Range Mountains, May 3, 1904.

Noted throughout the upper course of the Bacoco River, a tributary of the Agusan River, eastern Mindanao, May 4, 1904; also from Tingalé on the lower Bacoco River to Compostela on the upper Agusan River, May 5, 1904.

(Sheet III.)

Motacilla boarula melanope Pallas.

Noted on the Agusan River at Compostela, in the interior of Mindanao, May 5, 1904.

Pilar to Jativa, Agusan River, Mindanao, May 6, 1904.

Manila, P.I., August ~~[illegible]~~ 14, 1904

Banban River, near Camp Stotsenburg, Luzon, November 28, 1905

Bued River Valley, Luzon, Nov. 30 to Dec. 1, 1905.

Not uncommon on the roads and openings in the pine woods around Baguio, Benguet Province, Luzon, December 1 to 12, 1905.

Trinidad, altitude 4500 ft., Benguet Province, Luzon, Dec. 3, 1905.

Meade Road and Bued River Canyon, Luzon, Dec. [illegible]

Bued River Canyon, Luzon, December [illegible]

Dagupan to Bayambang, Pangasinan Province, Luzon, Dec. 15, 1905

Abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

Laoag River near its mouth, Ilocos Norte, Luzon, January 16, 1907.

Laoag River from Laoag to Dingras do " 16, "

Dingras to Padsan, Ilocos Norte, Luzon, January [illegible]

Several beside the Laoag River between Dingras and Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

Common along the Laoag River below Laoag, January 19 to 22, 1907.

Laoag to Vintar Lake, Ilocos Norte, Luzon. " 23-24 " and Febr. 5.

Laoag River and Laoag Lake do " 27 "

On all streams & sea beaches, Laoag to Naguirian Febr. 15, 1907.

(Sheet IV.)

Motacilla boarula melanope Pallas.

Scarce, frequenting the stony riverbed, at Nagpartian, Ilocos Norte Province, Luzon, February 15 to March 9, 1907.

Everywhere on streams and sea beaches, from Nagpartian to Laoag, Ilocos Norte, March 9. 1907.

Tuguegarao River and Cagayan River, wintering, Dec. 22, 1906.

Abundant, though not in flocks, wherever there was flowing water, from Twin Peaks to Baguio, Benguet Province, Luzon, December 24, 1906.

More common than I have seen it elsewhere, all along the Bued River, and in the open pine woods up to 5000 feet, in the vicinity of Camp John Hay, Benguet Province, Luzon, Dec. 23, 1906 to January 4, 1907.

None remain in the Benguet highlands beyond the month of May.

Abundant on the Naujan River and Lake Naujan, Mindoro, March 25, 1907.

Mouth of Baco River, Mindoro Island, Nov. [illegible], 1906.

Benibi River, Mindoro, Nov. 3–5, 1906.

Common, singly, on boulders in the Alag River, Mindoro, Nov. 5–8, 1906.

A few on the Alag and [illegible] rivers, Mindoro, Nov. 8, 1906.

One pair, specimen collected, on Balut Island, Sarangani group, October 8, 1906.

(Sheet I.)

[illegible] (Pipits [illegible])

323. Motacilla melanope Pallas.

[illegible] from [illegible] striatus [illegible]
[illegible] Yellow Wagtail.

Probably more than one species is included; in opinion "Yellow" Wagtails were noted at Bamboanga, Mindanao, October [illegible], 1903.

At Baganga, eastern Mindanao, October 22, 1903, I saw several Wagtails flitting [illegible] the [illegible].

On the Rio Grande, Mindanao, October 19, 1903, a Wagtail was occasionally seen (floating on a log or one of the log fenders placed by the native Moros as a protection against crocodiles

Wagtails were seen at Davao, southern Mindanao [illegible]

Noted at Bula, Sarangani Bay, " " " 26, "

Noted on Sulu, November 13, 1903, in crossing the island from the [illegible]; "Yellow-billed Wagtails" were noted on the trail from Upas house to Crater Mountain, November 15, 1903, and about Crater Mountain, November [illegible]; some were seen on the beach near Siet Lake, November [illegible]; along the beach from Taglibi to Jolo, November 21 [illegible]. At Jolo, "Yellow-breasted" and "White-breasted" Wagtails were noted, November 21–26, 1903; perhaps seasonal conditions of on[illegible]

323. Motacilla melanope Pallas. [illegible]

A male (No. 13158) shot at Zamboanga, Mindanao, December 7, 1903, has the breast white spotted with yellow. A female (No. 13159) shot the same day had the breast yellow.

"The smaller Wagtail" was noted at Dipulog, northern Mindanao, P. I., February 14, 1904.

"The smaller Wagtail" was noted at Lubungan, northern Mindanao, P. I., February 14, 1904.

"The smaller Wagtail" was noted at the Subano village of Sindangan, on Sindangan Bay, northern Mindanao, February 16, 1904.

None seen at Cottabato, March 3–5, 1904.

"Yellow Wagtails" were "numerous" at Kudarangan, on the Rio Grande, southern Mindanao, P. I., March 6, 1904.

Noted at Camp Vicars (3000 feet altitude), Mindanao, March [illegible]

In flocks in old garden patch at Camp Vicars (3000 feet), Mindanao, April 1, 1904. Two specimens shot (no. 13424–5).

Noted from Camp Vicars to Sonior, on Lake Lanao, Mindanao, April 2, 1904.

Noted in flying from Rasayan to Taraca River, Lake Lanao Basin, April 4, 1904

Great numbers were noted on the lowest portion of the Taraca River, below Malungan, April 5, 1904; also at Galauan and the upper and at the Pitfall Taraca River, April 6 to 8, 1904; between Galauan and Basayan, April 8; At daybreak, April 9, many Wagtails were flying about our camp at Basayan. Noted between Camp Vicars and Malabang, April 11, 1904; especially numerous at Vicars. [illegible] have been Motacilla

Budytes flavus leucostriatus (Homeyer).

Asiatic Yellow Wagtail.

Noted at Malabang, southern Mindanao, September 29, 1903.

Noted at Surigao, northeastern Mindanao, April 20, 1904.

Two seen in Malate suburb of Manila, Sept. 19, 1905.

Many seen in rice fields, on road to Fort William McKinley " 22, "

Noted at Surigao, northeastern Mindanao, April 21, 1904.

Abundant at Zamboanga, Jan. to Mar., 1906.

" " April 11, 1906.

Enormous flocks at Ayala, Mindanao, P. I., April 24, 1906. Now very yellow on underparts.

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

Abundant from the Upper Libungan River, east of Cotabato, to Senanaya, March 11 and 12, 1904. Notes resemble those of our Kingbird (Tyrannus [illegible]

Very abundant on the Rio Grande from the mouth of the Senanaya Estero to the river mouth, March [illegible]

Abundant on the Tubay River and shores of Lake Mainit, northeastern Mindanao, April 22-24, 1905.

Baganga to Christian Cider's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Compostela, Agusan River, Mindanao, May 5, 1904.

Agusan River from Pilar to Talaba, Mindanao, May 6, 1904.

" " at Varicella, on driftage, " " 7, "

(Sheet IV.)

Budytes flavus leucostriatus (Homeyer).

Only one noted on Lake Lanao, (Agusan Valley, Mind., [illegible]

"Many" noted at Jimenez, northern Mindanao, May 12, 1904.

Camp Holzenburg, Luzon, Nov. 28, 1905

Pozo rubro, Pangasinan Province, Luzon, Nov. 30, 1905.

A few were seen in openings of the pine woods about Baguio, Benguet Province, Luzon, Dec. 1-12, 1905.

Hundreds flocked about the ~~[illegible]~~ margin of Trinidad Lake, Benguet Province, Luzon, December 3, 1905, where I noted its often alighting and perching on weeds.

Meade Road, Benguet Province, Luzon, [illegible]

Bued River Canyon to Dagupan, Luzon, [illegible]

Dagupan to Bayambang, Pangasinan Province, Luzon, Dec. 15, [illegible]

Abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

Abundant in the cultivated lands bordering the Laoag River below the town of Laoag, January 15, 1907.

Laoag River from Laoag to Dingras, Ilocos Norte, Luzon, Jan. 16, 1907.

Abundant from Dingras to Paoay, do " 17, "

" " " " Laoag, do " 18 to 22,

Abundant along the Laoag River below Laoag, January 19, 1907.

" from Laoag to Pinta Lake, Ilocos Norte, " 23-24, 1907.

" " " " Paoay " , do " 27, "

Laoag River and Paoay Lake do Febr. 5, "

Abundant from Laoag to Nagpartian, do " 15, "

(Sheet 4.)

Budytes flavus leucostriatus (Hom.).

Lingayen to Twin Peaks, Pangasinan Province, Luzon, Dec. 23, 1906.

Twin Peaks to Camp John Hay, Benguet, Luzon, Dec. 24, 1906.

From Dec. 23, 1906 to January 4, 1907, I found it abundant at sealevel at Dagupan; abundant at Trinidad Lake, 4500 feet; and occasionally in direct dry, open places in the vicinity of Baguio and Camp John Hay, Benguet Province, Luzon.

On May 6, 1907, some were still present at Trinidad Lake, Benguet Province, Luzon. (Specimen 15142).

All left the Benguet highlands before the middle of May, 1907, none remaining to breed there.

Legaspi, Albay Province, Luzon, March 28, 1907.

Up to 2000 feet on the base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

Flocks were noted, on the Naguilian Trail from Baguio to the coast at Camp Wallace, Luzon, March 19 and 20, 1907.

Near Camp Wallace, La Union Province, Luzon, May 20, 1907.

Flocks were seen at Santo Domingo de Basco, Batan Island, P. I., May 27, 1907.

Naujan to the Naujan River, eastern Mindoro, March 25, 1907; also on the Naujan River and Lake Naujan the same day.

Calapan, Mindoro Island, October 31, 1906.

Not seen on Palawan Island until my second visit when a flock of about 30 passed over from the North, on October 7, 1906.

(Sheet VI.)

Budytes flavus leucostriatus (Homeyer).

Isabella, Basilan Island, January 25 and 27, 1906.
Flocks on the burnt cogonals from Lipo Lipo to Camp No. 8, interior of Basilan Island, February 3, 1906.
Camp No. 8 to La Milan, north Basilan, February 4, 1906.
Caleel, east Mindanao, October 5, 1906.
Manay, east Mindanao, October 6, 1906.
Sulu Island, from Jolo to Bud Dajo, October 11, 1906.
Siasi Island, October 12, 1906.
Several, on Loran Island (off Ubian Island), October 12, 1906.
Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Dict Lake, March 1 and 2, 1906.
[near site of Dorey's Camp No. 4, Jan. 30–31, 1906] west coast of Basilan Island, March 3, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Several on shore of Calamian Island, September 13, 1906.
Mariquina Valley, Rizal Province, Luzon, September 17, 1906.
Pasig, Taytay, and Antipolo, Rizal Province, Luzon, Sept. 21, 1906.

Man-oke Lad'-ong (Moro at Bu[illegible]

326. Anthus rufulus Vieillot.

Indian Pipit.

All of my specimens

All species of Anthus are included.

Abundant at Parang, northern Mindanao, Oct. [illegible]

Noted at Bula, on Sarangani Bay, " " " [illegible]

West side of Lake Lanao, Mindanao, November [illegible]

North " " " " " " [illegible]

On the island of Sulu, many were seen in crossing the island from Siet [illegible], Nov. [illegible] to [illegible], On the trail from Upa's house to Carat's Mountain, Nov. 15. Some were seen along the beach, between Tagbibi and Jolo, November [illegible], 1905. Jolo, Sulu, November 21-26, 1903.

Titlarks were noted at Jolo, Sulu Island, Feb. 4, 1904.

Noted at Dipulog, northern Mindanao, P.I., February 14, 1904.

" " Lubungan, " " "

" " Iligan, " " February 15, 1904.

" " the Subano village of Sindangan, on Sindangan Bay, northern Mindanao, P.I., February 16, 1904.

I could find no Titlark at Cotabato, March 3-5, [illegible]

Noted from Malabang to Camp Vicars (0 to 3000 feet), March 31, 1904.

Noted as abundant at Camp Vicars, 3000 feet, Mindanao, April [illegible], 1904

Noted from Camp Vicars to Sonis, on Lake Lanao, Mindanao, April 2, 1904.

Noted in small numbers in the Taraca Valley from Ampuanika's cota at Malungan to the rivermouth, April 5, 1904.

326. Anthus rufulus Vieillot. Indian Pipit.

Noted at Isabella, Island of Basilan, January 19, 1904.

Noted at Camp Vicars (altitude about 2900 feet), Mindanao, September 28 and 29, 1903; also from Camp Vicars to Malabang, Sept. 29, 1903; also at Malabang, Mindanao, Sept. 29 and Oct. 7-9, 1903.

One seen in Calle H, Manila, Sept. 6, 1905.

Abundant at Manila, September 20 to 30, 1905; Oct. 1

Ayala, Mindanao, P. I., April 24, 1906.

Pantar, Mindanao (1800 feet), August + September, 1903.

Veranaya Marshlo Labas, Libungan Valley, east of Cotabato, March 12 and 13, 1904.

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

One was shot at Jabanga, on Lake Mainit, north-eastern Mindanao, April 24, 1904; abundant at Jabanga.

"A few" noted at Baganga, eastern Mindanao, April 26, 1904.

Baganga to Christian Cdo's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Langaran, northern Mindanao, May 13, 1904.

Baliangao, on Murcialagos Bay, N. Mindanao, May 13, 1904.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Stotsenburg, " " " 28, "

Camp Gregg, Pangasinan Province, " " " 29, "

Dagupan, " " " " 30, "

326. Anthus rufulus Vieillot.
Indian Pipit.

Many of these Pipits were observed along the wagon road from Pantar to Marahui, Mindanao, Sept. 27, 1903.
Dagupan to Baguio, Luzon, Nov. 30, to Dec. 1, 1905.
Not uncommon in open places in the pine forests of Benguet. A number were seen on the military reserve now known as Camp John Hay, near Baguio, December 1–12, 1905.
Several noted beside Trinidad Lake, Benguet Province, Luzon, December 3, 1905.
Meade Road, Benguet Province, Luzon, Dec. 13, 1905.
Bued River to Dagupan, Pangasinan Province, Luzon, Dec. 14, 1905.
Dagupan to Bayambang, " " " " 15, "
From Currimao to Laoag, Ilocos Norte, Luzon, January 14, 1907.
Abundant in the cultivated lands bordering the Laoag River, below the town of Laoag, January 16, 1907.
Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.
Many noted between Dingras and Sadsan, Ilocos Norte, Jan. 17, 1907.
" " " " " Laoag, " " " 18, " to 22, "
" " in the Laoag Valley below Laoag, do " 19, "
" " between " and Vintar Lake, do " 23-24, "
" " " " Laoag " , do " 27, "
Everywhere, from Laoag to " " , do Feb. 5, "
" " " " Nagpartian, do " 15, "

Anthus rufulus Vieillot.

Found at the extreme northwest point of Luzon, Ilocos Norte Province, February 19, 1907.

Abundant at Nagpartian, Ilocos Norte, Luzon, Febr. 15 to Mar. 9, 1907; always to be seen in considerable numbers on the central plaza of the village.

Everywhere from Nagpartian to Laoag, March 9, 1907.

Negritan (Twin Peaks), Benguet Province, Luzon, December 23, 1906.

Twin Peaks to Camp Johnston, Benguet, Luzon, Dec. 24, 1906.

Abundant in openings and clearings in the pine woods up to 5000 feet, in the region surrounding Baguio, Benguet Province, Luzon, Dec. 24, 1906 to Jan. 4, 1907.

Legaspi, Albay Province, Luzon, March 28, 1907.

~~Mere from the region at~~ Abundant up to 2500 feet on the base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

Abundant at Lucena, southern Luzon, March 30, 1907.

Abundant in suitable places from Baguio, Benguet Province to Camp Wallace, La Union Province, Luzon, ~~March~~ May 19 and 20, 1907.

Common at Camp Wallace, La Union, Luzon, May 20–25, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Sibi and Pili Hot Springs, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Abundant on Batan Island, in the vicinity of Santo Domingo de Basco, May 2[illegible], 1907.

(Sheet V.)

Anthus rufulus Vieillot.

Luga Island, P. I., May 29 and 30, 1907.
Nanjan River and Lake Nanjan, Mindoro, March 25, 1907.
Specimen: No. 14580. Ad., Calapan, Mindoro, Dec. 8, 190[illegible].
Camp No. 9 (Musser's plantation, 2 miles west of Isabella), north Basilan, Feb. 21, 1906. Specimens: Nos. 13975, 13976.
Musser's plantation, near Isabella, Basilan Id., Feb. 22, 1906.
Abundant at Burengo, Calubig River, north Samar, October 1, 1906; Specimen: No. 14333, Ad.
Lanang, east Samar, October 3, 1906.
Cateel, east Mindanao, October 5, 1906.
Manay, east Mindanao, October 6, 1906.
Zamboanga, Mindanao, January 12, 1906.
Parang Parang, southern Mindanao, March 14, 1906.
Cotabato, ~~to~~ southern Mindanao, March 15, 1906.
Ayala, western Mindanao, August 27, 1906.
Marikina Valley, Rizal Province, Luzon, September 17, 1906.
Manila, Pasig, Taytay, and Antipolo, Luzon, Sept. 21, 1906.
Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 16 and 18 to 20, 1904.

(Sheet I.)

Anthus maculatus Hodgs

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

Common in the pine forests of Benguet, December 1 to 12, 1905. When flushed from the grass they alight in the ~~limbs of~~ pines, and run nimbly along the pine boughs, wagging their tails.

This tree pipit was found almost to the top of Mount Santo Tomas, Benguet, Luzon, Dec. 10, 1905.

Meade Road, Benguet Province, Luzon,

Noted in Bued River Canyon, Luzon, as low as Twin Peaks, December

Abundant in the pines, near Camp [illegible] in Benguet Province, Luzon, December 24, 1906.

Camp John Hay, Benguet Province, Luzon, Dec. 24 to Jan. 4, 1907; abundant everywhere here in the pine woods. Flushed from the grass it flies to a pine bough and runs out. Takes wagging jerky about, getting much of its food in the trees which it sometimes ascends to the highest tops. Notes at a distance suggest those of Regulus satrapa; but it has, in addition, quite a variety of chirpings, including a rough chirp uttered as it rises from the grass.

301. Oriolus chinensis Linnaeus.
Chinese Oriole.

Ko-loo'-yah (Moro of Lake Lanao), No. [illegible]
Sah-lee'-oh, Bagobos of Mount Apo, Mindanao.

[illegible] at Pantar in August & September
All of the genus Oriolus are included.
Noted at Manay, southeastern Mindanao, October 23, 1903.
One male was noted on the Rio Grande above Cottabato, October 19, 1903.
Noted at Davao, southern Mindanao, [illegible]
" " Santa Cruz, on the west shore of the Gulf of Davao, southern Mindanao, October 25, [illegible]
Major-General Leonard Wood, U.S. Army, shot a male at Glan, southern Mindanao, October 26, 1903.
North side of Lake Lanao, Mindanao, November 3, [illegible]
On the island of Sulu, P.I., Orioles were noted as follows: From Panglima Hassan's to Upa's place, November 14, 1903; on the trail from Upa's house to Crater Mountain, Nov. 15: abundant around Crater Mountain and Hassan's [illegible], November 15-[illegible]
It ~~flies with~~ has an undulating, very characteristic flight, and utters a mellow whistle. Jolo, Nov. 21-26, 1903

Oriolus (~~of species~~) chinensis

A male of Oriolus chinensis was seen on ~~the~~ Dungdung Island, off Sulu, P. I., November 25, 1903.

At Pangapuyan Island, off Mindanao about 12 miles east of Zamboanga, December 11, 1903; again noted on February 2, 1904 (black-capped species).

Two were shot at a Moro village four miles up the Cabasaran River, southern Mindanao, Jan. 30, 1904.

Datto Salis Hasin's residence, and along the banks of the Cabasaran River, January 30 and 31, 1904

On Buluan Island, ~~off southern Mindanao~~ and Banga Island (Port Banga), (black-capped), Feb. 1, 1904.

Found at Tambogan, Tambogan Bay, southern Mindanao, February 1 and 2, 1904.

Orioles were noted in trees of the city squares, at Jolo, Sulu, February 4, 1904.

Common, one shot, at Dipulog N. Mindanao, Feb. 14, 1904.

Abundant at Lubungan, northern Mindanao, P. I., February 14, 1904 (one shot).

Noted at Iligan, northern Mindanao, February ~~14~~ 15, 1904.

Two were noted at Mucas, at the mouths of two rivers, ~~at the~~ on Sindangan Bay, northern Mindanao, P. I., February 16, 1904.

Noted at Santa Maria, northern Mindanao, Febr. 17, 1904.

An Oriole was noted between Datto Upa's residence and his market at Bual, Sulu Island, P. I., Feb. 21, 1904.

Oriolus (all species).

Oriolus chinensis was noted on West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, February 21, 1904.

Note.- There were said to be no Orioles on the island of Cagayan Sulu, and I saw none there.

On my overland journey from Lake Buluan to Davao, Mindanao, in May and June, 1904, Captain H. K. McCoy, 3d Cavalry, A. D. C., noted them in the Agusan River Valley as well as on the Davao side of the mountain divide.

Numerous at Cottabato, Rio Grande Valley, Mindanao, P. I., March 3-5, 1904, when they were seen and singing in the trees beside the dock and in the town.

Noted at Kudarangan, on the Rio Grande, Mindanao, March 6, 1904.

Noted on the wagon-road between Malabang and Camp Vicars (0 to 3000 feet), March 31, 1904.

Near Lake Lanao, April 2, 1904, I saw two Orioles chase a crow far and furiously. It was seen as far up the Taraca River as Galauan, April 6, 1904; returning, some were seen, April 9 and 10, at Samir, on Lake Lanao, and thence to Vicars; also from Camp Vicars to Malabang, April 11, 1904.

Noted at Isabella, Island of Basilan, January 19, 1904.

Noted between Pantar and Marahui, Mindanao, September 27, 1903.

Oriolus chinensis Linnaeus.

Chinese Oriole.

Noted between Malabang and Camp Vicars, Mindanao, March 31, 1904, and returning, April 11, 1904; also at Malabang, Oct. 7-9, 1903.

I saw a young individual, caged, offered for sale in a street of Manila, August 22, 1905.

One seen on Calle H, Manila, September 7, 1905.

Noted at Glan, southern Mindanao, October 26, 1903.

Noted at Buluan, near Lake Buluan, Mindanao, May 21, 1904; also at the Malala ~~River~~ and Mumbawat rivers, and at Simpitan, May 23 to 26, 1904.

Descending the Buluan River, May 27, 1904, between Buluan and Pandog, some were noted.

Common throughout September, 1905, at Manila.

Many were seen when ascending the Iubay River, northern Mindanao, April 22, 1904.

Noted at Zamboanga, western Mindanao, ~~July 15 to 20~~ July 24 to August 1, 1904.

" " Davao, southern " , July 15 to 20, 1904.

Abundant on Malanipa Id., off S.W. Mindanao, April 22, 1906.

Always abundant at Zamboanga, Mindanao, P.I.

Ayala, Mindanao, P.I., April 24, 1906. I saw one attacked by Copsychus mindanensis.

Common at Pantar and Lake Lanao, Aug. & Sept. 1903.

Dranaya Marsh to Labas, Libungan Valley, east of Cotabato, March 12 and 13, 1904.

243 (Shu-Fu)

Oriolus chinensis Linnaeus.

Piangs to Barak, Rio Grande Valley, Mindanao, March 9-11, 1904 Deranaya Fort, March 12-14.

Zamboanga, March 15, 1904.

Noted on the Tubay River and Lake Mainit, northeastern Mindanao, April 22-24, 1904; noted as "rather scarce" between Gabanga, on Lake Mainit and Dinbego.

Baganga to Christian Elder's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 28, 1904.

Numerous from Pilar to Jativa, on the upper Agusan River, Mindanao, May 6, 1904.

Abundant, Jativa to Patrocino, Agusan River, Mindanao, May 7, 1904.

Noted below Patrocino and at Varicella, May 7, 1904.

Abundant in the Agusan Valley from Lake Linao to Talacogon, May 9, 1904; 6 seen in one flock.

Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11, 1904. Starting from Talacogon at 4:45 A.M., cuckoos and orioles were the first birds heard as we glided down the quiet river.

Mouth of Agusan River, Mindanao, May 11, 1904.

Langaran, northern Mindanao, May 13, 1904.

Baliangao, on Murcialagos Bay, N. Mindanao, May 13, 1904.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905.

San Pedro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

(Sheet XI.)

Oriolus chinensis Linnaeus.

Camp Hotsenburg, Luzon, Nov. 28, 1905.
Camp Gregg, Pangasinan Province, " " 29, "
Dagupan, " " " " 30, "
Dagupan to Pozorrubro, Pangasinan Province, Luzon, Nov. 30, 1905.
Common everywhere from Pozorrubro to Dagupan, Luzon, December 14, 19[illegible]
Dagupan to Bayambang, Pangasinan Province, Luzon, Dec. 15, [illegible]
Dammi Island, Sulu Sea, January 4, 1906
Common on three small wooded islands off the south end of Dibute Island, January 5, [illegible]
Abundant from Currimao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.
Laoag, Ilocos Norte, Luzon, January 15, 1907.
Abundant and singing sweetly near the mouth of the Laoag River in Ilocos Norte Province, Luzon, January 16, [illegible]
Laoag to Dingras, do — " [illegible]
Common from Dingras to Paoay, do " [illegible]
" " " " Laoag, do " 18, "
" in the Laoag Valley below Laoag, do " 19, "
Orioles reside in abundance in the most populous towns of Ilocos Norte, living chiefly in eucalyptus and tamarind trees. Noted at Laoag, January 20, 1907.
Abundant in the Laoag Valley below Laoag, Ilocos Norte Province, Luzon, January 20–22, 1907.

(Sheet ~~VII.~~)

Oriolus chinensis, Linnaeus.

Lacoag to Pocsy Lake, and beside lake, Ilocos Norte, Luzon, Jan. 27 and Feb. 5, 1907

Sand Ridges, north of Lacoag, Ilocos Norte, Luzon, February 7, 1907:

one ~~note~~ song like that of our western meadowlark.

Abundant, Lacoag to Nagpartian, Ilocos Norte, Luzon, Nov. 15, 1907.

Burdett's Manganese Mine, do " 19. " .

Abundant at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.

Utters a scream exactly like that of Tanygnathus lucionensis.

Everywhere, from Nagpartian to Lacoag, Ilocos Norte, March 9, 1907.

" " Lagyapaile Swift Peak, Luzon, Dec. 23, 1906.

" from Legaspi up to 2500 feet on the base of Mount Mayon, Albay Province, Luzon, March 28, 1907.

Noted at Tabaco, Albay Province, Luzon, March 29, 1907.

Abundant at Lucena, southern Luzon, March 30, 1907.

Descending by the Nagillian Trail, March 19 and 20, 1907, it was noted from Sublao to the coast at San Fernando, Luzon, ~~March~~ March 19 and 20, 1907.

Casiguran, east coast of Luzon, June 1, 1907.

Tibi and Pili Hot Springs, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Very abundant on Huga Island, P. I., May 29 and 30, 1907.

Sweet singer. One note is like the cry of Tanygnathus.

Abundant from Naujan to Lake Naujan, eastern Mindoro, March 25, 1907. Calapan, Mindoro Oct. 31, 1906.

(Sheet VIII.)

Oriolus chinensis Linnaeus.

Beribi River, Mindoro, Nov. 3–5, 1906.

Specimens: No. 14550. ♂ juv., Dubaan, Mindoro, Dec. 5, 1906.

" 15583. ♂ ad., Calapan, " " " 8, "

Sarangani Island, off southern Mindanao, October 8, 1906.

Isabella, Basilan Island, January 27, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

Camp No. 3 to Camp No. 4, northwest Basilan, January 30, 1906.

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, Feb. 18, 1906.

Malusa, west Basilan, February 19, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's Plantation, near Isabella, Basilan, Feb. 22, 1906.

Lower Catubig River, north Samar, October 1, 1906.

Burengo, Catubig River, north Samar, October 1, 1906.

Cajoagan Island, off north Samar, October 2, 1906.

Abundant at Lanang, east Samar, October 3, 1906.

Bucas Island, off northeast Mindanao, October 4, 1906.

Lower Cateel River, east Mindanao, October 5, 1906.

Mr. Reyes showed us a mounted specimen killed by him at Caraga, eastern Mindanao. (note of Oct. 6, 1906.)

Manay, east Mindanao, October 6, 1906.

Sulu Island, from Jolo to Bud Dajo, October 11, 1906.

(Sheet 1X.)

Oriolus chinensis Linnaeus.

Siasi Island, October 12, 1906.

Several seen on Loran Id., off Ubian Id., October 12, 1906.

Common, one shot, on Tumindao Island (off Sitankai Island), October 13, 1906.

Near Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.

Mamuk Manka Island, January 6, 1906.

Simaluc Island, off Tawi Tawi Island, January 8, 1906.

East Bolod Island, Sulu Sea, January 10, 1906.

West Bolod Island, Sulu Sea, January 10, 1906.

Zamboanga, Mindanao, January 12, 1906.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

, [near site of Dorey's camp No. 4, Jan. 30-31, 1906] west coast of Basilan Island, March 3, 1906.

Parang Parang, southern Mindanao, March 14, 1906.

Cotabato, southern Mindanao, March 15, 1906.

One shot on Malanipa Island, in the Celebes Sea off south Mindanao, April ~~2~~ 1, 1906

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Igat Bay, off south Mindanao, April 2, 1906.

Abundant at Ayala, western Mindanao, August 27, 1906, when I collected a nestling in 1st plumage.

(Sheet X.)

Oriolus chinensis Linnæus.

Camp Connell, west coast of Samar Island, September 5, 1906.
Common on Cuyo Island, Sulu Sea, September 10, 1906.
Marikina Valley, Rizal Province, Luzon, September 17, 1906.
Montipolo, Rizal Province, Luzon, September 21, 1906.
Common at Sulug, east shore of Gulf of Davao, southern Mindanao, June 12, 1904.
Davao, southern Mindanao, June 13, 1904.
At Davao, southern Mindanao, June 13 and 18 to 20, 1904, its song suggested the syllables so-fough'-ah.
Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.
1725 feet altitude on Mt. Apo trail, Mindanao, June 16, 1904.
Todaya, 4000 ft., Mt. Apo, Mindanao, June 17, 1904.
Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Camp Overton, northern Mindanao, July 9, 1906.
Tacloban, Leyte Island, July 24, 1906.
Camp Overton, northern Mindanao, May 7, 1906.

Ing-ofi', Moros of Basilan Island. (Sheet I.)

Oriolus steerei Sharpe

Abundant between Camp No. 4 and Camp No. 5, north-west Basilan, January 31, 1906. Called Ing-ofi' by Basilan Moros; two were shot.

Two were shot between Camp No. 5 and the Cumalarang River, interior of Basilan Island, February 1, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.

Tipu Tipu, interior of Basilan Island, February 15, 1906.

Camp No. 3 to Camp No. 4, Basilan, Feb. 16, 1906; No. 13955 taken.

Specimen No. 13994, ♂ ad., was shot on a tree on the beach, west shore of Basilan Island, March 3, 1906. [near site of Dorey's Camp No. 4, of January 30-31, 1906.]

288. Corone philippina Bonaparte.

Philippine Crow.

Kabu-quanok' (Moros of Lake Lanao).

Huac (Viscayan Filipinos of Marang, southern Mindanao).

Huac or Hoo-huac', Bagobos of Mount Apo, Mindanao.

Abundant at Davao, Mindanao, and at L. Lanao, Bay of Sulu.

Noted at Zamboanga, Mindanao, P. I., October [illegible]

Noted at Bagauga, eastern Mindanao, P. I., October 22, 1903.

" " Manay, southern " " " "

" " Mati, southern " " " "

" " Parang, " " " "

Abundant along the Rio Grande, Mindanao, October 19, 1903.

Noted at Davao, southern Mindanao, October 24, 1903.

Noted at the Moro village of Maliyan, southern Mindanao, October 25, 1903.

Crows were noted on the shore of Sarangani Bay, at Makar, southern Mindanao, October [illegible]

West side of Lake Lanao, Mindanao, November 2, 1903.

At Bacolod, on the north side of Lake Lanao, Mindanao, November 3, 1903, I saw a crow fly from a tree-top and catch a flying grasshopper [illegible]

On the island of Sulu, P. I., November 12 to 26, 1903, crows were seen as follows: From Dec[illegible]

Philippine Crows (Sheet II.)

288. Corone philippina Bonaparte.

across the island, November [illegible] about Crater Mountain, November 15-18; abundant at Jolo, November 21-26, 1903, frequenting our camp and the Quartermaster's corral, where it was surprisingly tame.

Common on Pata Island, off Sulu, P.I., November 25, 1903.

At daybreak, on the riecfields of Zamboanga, Mindanao, P.I., Crows passed overhead in great numbers, December 2, 1903.

Noted at Pangapuyan Island off Mindanao about 12 miles east of Zamboanga, December 11, 1903, and February 2, 1904

At Zamboanga, December 7, 1903, "great flights at nightfall and early morning" were noted.

Noted at the Subano village of Buing Buing, and also on the Cabasaran River, southern Mindanao, January 30, 1904.

Noted at Bulnan, opposite the island of Bulnan, on the mainland of southern Mindanao, January 31, 1904.

Numerous at the residence of Datto Salis Hasin, two miles from the Cabasaran River, southern Mindanao, January 31, 1904.

On Bulnan Island, and Banga Island off southern Mindanao, Feb. 1, 1904.

Found at Tambigan, Tambigan Bay, southern Mindanao, February 1 and 2, 1904

Noted at Iligan, northern Mindanao, February 15, 1904

288 Corone philippina Bonaparte. Philippine Crow.

Jolo, Sulu Island, February 4, 1904. Crows are abundant in the walled city. They are as tame as Sparrows, and enter buildings and soldiers' kitchens. They brawl and fight like dogs, on the walls, and on the benches of the park.

I saw plenty of Crows at Siassay, island of Siassay, P. I., February 4, 1904.

Zamboanga salt works, February 11, 1904.

Crows were noted as abundant at Dipulog, northern Mindanao, P. I., February 14, 1904.

Abundant at Lubungan, northern Mindanao, Feb. 14, 1904.

Noted at Camp Overton, northern Mindanao, Feb. 15, 1904.

Abundant at the Subano village of Sindangan, on Sindangan Bay, northern Mindanao, P. I., February 16, 1904.

Crows in flock, by relays, pestered the Cockatoos on a tall tree, swooping upon them and raising a great clamor.

Noted at Santa Maria, northern Mindanao, Feb. 17, 1904.

Dozens of Crows were feeding on refuse from Colonel Scott's large military camp at the residence of Datto Upa, Sulu Island, P. I., February 21, 1904.

Note.— There were said to be no Crows on the island of Cagayan Sulu, P. I., and we saw none there.

(Sheet IV.)

288. Corone philippina Bonaparte

Found on the island of Siassi, P. I., by Captain T. L. Smith, 17th Infantry, U.S. Army, and by myself, in the years 1903–4.

Noted on the lowest part of the Rio Grande de Mindanao, March 2, 1904; abundant at Cottabato, March 3–5, 1904, when they flew familiarly about the vessels, and industriously fished out food from the dirtage along the banks of the Rio Grande.

Kudarangan, on the Rio Grande, Mindanao, March 6, 1904.

Noted at Camp Vicars (3000 ft.), Mindanao, April 1, 1904.

Noted from Camp Vicars (3000 ft.) to Sonir, on Lake Lanao (2000 ft.) April 2, 1904.

Noted from Sonir on Lake Lanao to Rogayan in the Taraca Valley, April 3, 1904.

At Rogayan, Taraca Valley, April 4, 1904 Crows came into camp and filled up on boiled rice and hardtack. They were so bold as to, to step out of our way.

At daybreak at Malungan, on Taraca River, April 5, 1904, Crows began to assemble until hundreds had arrived and taken the camp in fearless array. Basayan, near Lake Lanao, April 9, 1904. — "On waking shadowy forms of Crows were passing over the camp. Many at Camp Vicars, and on the wagon-road from Vicars to Malabang, April 11, 1904."

Noted at Isabella, Island of Basilan, January 19, 1904.

Several were seen on the outskirts of Manila during July and August, 1905.

Noted at Marahui, Mindanao, September 27, 1903.

(Sheet V.)

Corone philippina Bonaparte.
Philippine Crow.

Noted at Camp Vreans (altitude about 2900 feet) Sept. 28 & 29, 1903.
Noted at Malabang, Mindanao, October 7-9, 1903.
Crows were noted at Parang (Sept. 30) at Buldung, Madalum, and Cararao Pass, Mindanao, Sept. 30 to Oct 5, 1903; and some were seen in the forest, between the peaks; also at Lake Butig, south of Lake Lanao, Mindanao, Oct. 5 and 6, 1903.

The absence of the Crow from Lake Liguasan, Mindanao, during the middle part of May, 1904, is commented on in my my notes. During three days spent on the lake (May 17 to 19) not one was seen.

At Buluan, near Lake Buluan, Mindanao, May ~~20~~ 21, 1904, I saw a Fan-tailed Flycatcher chase a Crow. Crows were quite numerous on the Buluan River, May 20 to 23, 1904. Sometimes the voice of the Crow sounds like ~~that of~~ the domestic Duck's. About the Moro village of Buluan it was quite abundant May 21 to 23, 1904; and it was also noted at Malala River and Seimpitan, May 23 to 26, 1904.

Descending the Buluan River, from Buluan to Pandog, May 27, 1904, some were observed.

Many were seen along the Rio Grande from Lake Liguasan to the rivermouth, May 28 and 29, 1904.

Noted at Surigao, northeastern Mindanao, April 20, 1904, when I saw two Fan-tailed Flycatchers chase one that flew away with what looked like a small birds' egg its bill impaled on

(Sheet VI.)

Corone philippina Bonaparte.

Philippine Crow.

Noted at Placer, northeastern Mindanao, April 20, 1904.
Noted at Bacuag, northeastern Mindanao, April 21, 1904.
Noted at Dinagat, Island of Dinagat, April 21, 1904.
" " Surigao, northeastern Mindanao, April 21, 1904.
" " Tubay, " " " 22, "
During the ascent of the Tubay River, April 22, 1904, "many" Crows were noted; "in flocks, feeding upon the shore."
Noted at Zamboanga, western Mindanao, August 1, 1904.
Noted at Davao, southern Mindanao, July 15 to 20, 1904.
" " Jolo, Sulu, P. I., March 26, 1906.
Flock of four (one all white) on Malanipa Island off SW. Mindanao, April 1, 1906. Many others seen later.
Always abundant at Zamboanga, Mindanao, P. I.
Ayala, Mindanao, P. I., April 24, 1906.
Abundant at Pantar and Lake Lanao, Aug. & Sept., 1903.
Serunaya Marsh to Labas, Libungan Valley, east of Cotabato, March 12 and 13, 1904.
Noted at Baguio, Benguet, Dec. 1 and 2, 1905.
Piangs to Barak, Rio Grande Valley, Mindanao, March 7–11, 1904. Serunaya Fort, March 11–13, 1904.
Numerous on the Rio Grande from the mouth of the Serunaya estero to the rivermouth, March 14, 1904.
Zamboanga, March 15, 1904.

(Sheet ~~VII~~.)

Corone philippina Bonaparte.

Abundant on Lake Mainit and along the Tubay River, northeastern Mindanao, April 22–24, 1904, especially about the native towns of Tubay, Santiego, and Jabonga.

Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April [illegible], 1904.

I noted the absence of Crows from Ade's plantation to the [illegible] River, eastern Mindanao, April 27, 1904, and the first one was seen on the upper Baganga River, April 30, 1904. A second Crow, very bold, was noted last the same day, but the species seemed rare in the East [illegible]

Abundant at the Mandayan village of Lingali, on the lower Baeoco River, in the interior of Mindanao, May 4 and 5, 1904. also noted at Compostela, on the upper Agusan, May 5, 1904.

Many were seen on the Agusan, from Pilar to Jativa, May 6, 1904; and at Varicella, May 7, 1904.

Crows were common on the large lakes of the middle Agusan Valley, Mindanao, May 8 and 9, 1904.

Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11, 1904.

Mouth of Agusan River, Mindanao, May 11, 1904.

Langaran, northern Mindanao, May 13, 1904.

Baliangao, on Murcialagos Bay, N. Mindanao, May 13, 1904.

Abundant along the Manila and Dagupan Railroad, between Manila and Camp Gregg, Luzon, July 29 and 30, 1905.

Corone philippina Bonaparte.

(At Camp Gregg in the province of Pangasinan Luzon, July 29 and 30, 1905, there were evening flights of hundreds passing over the post; they awoke me at dawn, scattered everywhere in noisy companies.

San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.
Camp Holsenburg, " " " 28, "
Camp Gregg, Pangasinan Province, " " 29, "
Dagupan, " " " " 30, "

Along Manila and Dagupan Railroad between Camp Holsenburg and Camp Gregg, Luzon, Nov. 29, 1905.
Common along the wagon road from Dagupan to Baguio, Luzon, Nov. 30 to Dec. 1, 1905.

Very abundant at Baguio and the military reserve since named Camp Johnston, Dec. 1 to 12, 1905. Hun=dreds gathered around the new soldiers' barracks, which they entered freely when unobserved; surprisingly gentle, but they were amazingly quick to scent danger. It alights on the houses and in the dooryards of the native Igorota. I saw none of them on the higher portion of Mount Santo Tomas. On December 6, 1905, when I was engaged in preparing a deerskin, the crows fluttered over me, and came down after pieces of meat and fat which I almost handed them. I could not keep them out of my steel traps, from which I liberated some quite gently;

(Sheet IX.)

Corone philippina Bonaparte.

Common all along the road from Magpartan to Laoag, Ilocos Norte, Luzon, March 9, 1907.

A few at Camp Wallace, La Union Province, Luzon, May 20-25, 1907.

Aparri, northern Luzon, May 29, 1907.

Casiguran, east coast of Luzon, June [illegible]

Baler, east coast of Luzon, June [illegible]

Sibi and Sili Hot Springs, southeastern Luzon, June [illegible]

Base of Mount Mayon, Tabaco side up to 4000 feet altitude, Albay Province, Luzon, June 4 and 5, [illegible]

Abundant on Fuga Island, P. I., May 29 and 30, [illegible]

Many were seen along the trail followed from the town of Naujan on the east coast of Mindoro to a small fishing village on the Naujan Village, March 25, 1907.

Very numerous on Naujan Lake and River, Mindoro, March 25, 1907. I saw many flying with fresh-water shells in their bills.

Calapan, Mindoro, October 31, 1906.

The crows comb the beach from Calapan to Subaan, Mindoro (Nov. 1, 1906). When they find a dead hen, in the competition for its flesh they fight, and flop, and butt, and shoulder one another. ~~When~~ Soon a lucky one flies off with the fowl's entrails dragging or dangling. A belated one will jump with both feet and land in the midst of the flock that surrounds the prey.

Subaan to the Benibi River, Mindoro, Nov. 2, 1906.

(Sheet X.)

Corone philippina Bonaparte.

Common at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to March 9, 1907.
Extremely bold; one stole a civet's skull from my house

Gah-wahng' (Igorotes of Benguet).

Mr. Haight, during a residence of five years on the mountain near Pauway, in northern ~~Ben~~ Benguet, Luzon, saw but two crows. At Cabiai, one-half hour walk down hill from Haight's, I shot two, by request, that were perching upon an Igorot house.

Lagupan to Twin Peaks, Pangasinan Province, Luzon, Dec. 23, 1906.
Overgrown from Twin Peaks to Camp John Hay, Benguet, Dec. 24, 1906.
Twin Peaks to Lagupan, Pangasinan, Luzon, January 4, 1907.
Camp John Hay, Benguet, Luzon, Dec. 24, 1906, to Jan. 4, 1907.

A little more than a year ago, hundreds of crows waited around the barracks and kitchens for food; but, since then, they must have become unbearably impertinent, for they are now quite distant and respectful, doubtless having been shot at.

Common up to 2500 feet on the base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

Noted at Tabaco, Albay Province, Luzon, March 29, 1907.

Abundant at Lucena, southern Luzon, March 30, 1907.

Noted, in small numbers, from Baguio, Benguet to Camp Wallace, La Union, Luzon, ~~March~~ May 19 and 20, 1907.

Corone philippina Bonaparte.

but, at length my patience broke when one of them bit me severely, for which I stuffed its skin.

Common at Trinidad, Benguet Province, Luzon, Dec. 3, 1905. They came about the Igorot houses and mixed freely with dogs and children.

Meade Road, Benguet Province, Luzon, D[illegible]

Common everywhere from Baguio to Manila, D[illegible]

Lynch Possman, Tuinaras, Poland, December 24, 1905

Common from Cervinao to Laoag, Ilocos Norte Province, Luzon, January 14, 1907.

Abundant near the mouth of the Laoag River, Jan. 16, 1907.

Laoag to Dingras, Ilocos Norte, Luzon, January 16, 1907.

Common from Dingras to Padsan, Ilocos Norte Province, Luzon, January 17, 1907, when I shot one in the courtyard of the Datto's house at the Tinguane village of Pad[illegible]

Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

Few, Laoag Valley, below Laoag, do " 19 "

A few crows lived in the midst of the populous town of Laoag, Ilocos Norte Province, Luzon, January 20, 1907.

Abundant throughout the Laoag Valley below Laoag, " 20-22, 1907

" from Laoag to Vintar Lake, Ilocos Norte, Jan. 23-24, 1907 and Feb. 5,

" " " " Paoay " , do , " 27 "

" " " " Nagpartian, do Feb. 15, 1907.

(Sheet XII.)

Corone philippina Bonaparte.

Benibi River, Mindoro, November 3-5, 1906.
Davao, Mindanao, January 22, 1906.
Sarangani Island, off southern Mindanao, January 23 and October 8, 1906.
Numerous on Balut Island, Sarangani group, off southern Mindanao, Jan 23 and Oct. 8, 1906.
Abundant at Isabella, Basilan, January 26 and 27, 1906.
Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906
Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.
At Camp No. 3, Basilan Island, January 30, 1906.
Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906.
Tipo-Tipo to Camp No. 8, interior of Basilan Id., Feb. 3, 1906.
Camp No. 8 to La Mitan, north Basilan, February 4, 1906.
Malamani Island, off Basilan Island, February 13, 1906.
Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.
Tipu Tipu, interior of Basilan Island, February 15, 1906.
Camp No. 3 to Camp No. 4, Basilan Island, Feb. 16, 1906.
Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.
Camp No. 5 to Camp No. 6, south Basilan, Feb. 18, 1906.
Near Malusa (Camp No. 6 to Camp No. 7), west Basilan, Feb. 19, 1906.
Camp No. 7 to Camp No. 8, Basilan Island, Feb. 20, 1906.
Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.
Musser's plantation, near Isabella, Basilan Id., Feb. 22, 1906.

Corone philippina Bonaparte.

Abundant from Calubiq to the mouth of the Calubiq River, north Samar, October 1, 1906, when ~~the~~ Captain James K. Thompson shot one that was molting badly.

Abundant and bold at Borongan, east Samar, Oct. 3, 1906, when Mr. Horace Fletcher killed one at 100 yards distance with a 22 caliber rifle.

Abundant, one shot, at Sanang, east Samar, Oct. 3, 1906.

Common on Bucas Island, off northeast Mindanao, October 4, 1906, when 2 were shot.

Lower Cateel River, east Mindanao, October 5, 1906.

Caraga, east Mindanao, October 6, 1906.

Abundant, one shot, at Manay, east Mindanao, October 6, 1906, when large flocks assembled at the rivermouth to drink, just before dark.

Sulu Island, from Jolo to Bud Dajo, October 11, 1906.

Common on Siasi Island, October 12, 1906.

~~Common~~ ~~Abundant~~ on Loran Island (off Ubian Id.), October 12, 1906.

Tumindao Island, off Sitanki Island, Oct. 13, 1906.

On Corregidor Island, off Manila Bay, December 16, 1906, great numbers of crows had been attracted to the camps of workmen employed on the fortifi=cations, and their boldness was unparalleled. The Chinese cooks complained greatly of their pilfering.

Corone philippina Bonaparte.

At Manuk Manka Island, off Tawi Tawi, January 6, 1906, I noted: "No Crows beyond Jolo [to the southward]; " but this only applied to my experience of a few days on that trip.

At the Moro village of Sibutu, on the west coast of Sibutu Island, scores of them frequented the town and corrals, January 7, 1906, when I collected a specimen that was indistinguishable from those obtained in the highlands of Benguet Province, Luzon.

Siatu, Siasi Island, January 9, 1906.

Jolo, Sulu Island, January 9, 1906.

Balukbaluk Island, January 10, 1906.

Zamboanga, Mindanao, January 12, 1906.

Walled city of Jolo, Sulu Island, March 1, 1906.

Sulu Island, from Jolo to Maimbun, ~~to~~ Bud Dajo, Crater Lake, and Wet Lake, March 1 and 2, 1906.

, west coast of Basilan Island [site of Towns Camp, No. 4, Jan. 30, 31, 1906], March 3, 1906.

Parang Parang, southern Mindanao, March 14, 1906.

The Dwara Bulbul chased these crows away from the trees in which it (the Bulbul) was feeding, at Cotabato, southern Mindanao, March 15, 1906.

Malabang, southern Mindanao, March 15, 1906.

Margosatubig, southern Mindanao, April 2, 1906.

[illegible]

[illegible]

Philippine Islands.

No. 13039 ♂ (ad.?). Zamboanga, Mindanao, P. I., October 14, 1903. No measurements. No others seen. Shot in a tree. Plumage white, gray, and red.

Very numerous, in flocks, on Cagayan Sulu Island, October 15, 1906. Four specimens: Nos. 14427–30, ♂ & ♀.

Ethiopsar cristatellus (Linnæus). Chinese Myna.

292. Acridotheres cristatellus (Gmelin). Mina Bird.

This pretty but too noisy bird is abundant in the trees of Manila and its suburbs, on the island of Luzon, P. I., where I saw them daily, often in large flock, ~~during~~ in August and September, 1904. At evening they assembled in noisy flocks, moving from tree to tree until certain favorite trees were reached, either feeding places or roosting places, and there they assembled until their cries were almost deafening.

July 26 to August 15, 1904. — These birds are seen singly, in pairs, or in flocks up to 6, wherever there is vegetation in the city of Manila. Often they resort to the ground along the ditch outside the walled city, hopping about on the blackish mud or sitting in the shade of weeds.

Sept. 8, 1905. — At 10 o'clock, P. M., while waiting for a street car at Calle Arroceros, Manila, beside some trees these birds were continually awakening and screaming and squeaking loudly. They feed on the park lawns like Robins, and mixed with its harsh cries and twittering are some sweet notes of a song, most frequently heard at evening.

Trees packed with noisy hordes of them at Manila, Sept. 28, 1905.

Acridotheres cristatellus (Gmelin).

Chinese Myna-Bird.

Early in November these birds sang a Thrush-like song. The males would puff themselves up and erect their crests and strut and hop from tile to tile on the roof opposite my window occasionally breaking into song.

As I left Manila, Sept. 15, 1904, many of these birds sat on the city wall or alighted in the grass beside the moat. For several years the nightly roost of the Mynas has been in trees near the present police station just outside the city wall, where they assemble in noisy companies at dusk.

Noted at Manila, July 26–29 and July 31 to August 4, 1905; also seen in small companies from Manila to Camp Gregg, Luzon, along the Manila and Dagupan Railroad, July 29 and 30, 1905.

Camp Gregg, Pangasinan Province, Luzon, July 30, 1905.

Manila, Luzon, July to December, 1905.

Camp Stotsenburg, Luzon, Nov. 28, 1905.

Dagupan to Bued River, Luzon, Nov. 30, 1905.

Dagupan to Bayambang, Pangasinan Province, Luzon, [illegible]

In the park and public squares, Manila, January 12, 1907.

Pozorrubio, Pangasinan Province, Luzon, Dec. 23, 1906.

From Bued River, Luzon, to near Dagupan, January 4, 1906; often seen on the heads or backs of cattle.

(Sheet III.)

Æthiopsar cristatellus (Gmelin).

Nagillian to the coast at San Fernando, Luzon, ~~March~~ May 20, 1907; sits on backs of hump-backed cattle and carabaos.

Manila to Saylay, Luzon, in ricefields, September 21, 1906.

Noted one station north of Murcia, on Manila and Dagupan Railroad.

Noted at Manila, Luzon Island, July 15 to 18, 1906.

293. Sarcops calvus (Linnaeus).

Gad-[illegible] Grackle.

Boad Bahu'-dah (Moros of Zamboanga)

At Santa Cruz, Gulf of Davao, southern Mindanao, Capt. Frank R. McCoy saw these birds [illegible]

Noted at Davao, southern Mindanao, October [illegible]

On the island of Sulu, P. I., November 12-26, 1903, it was noted as follows: On the trail from Kiffa's house to Coral Mountain, Nov. 15; Mt. Sulumian and thence to the beach at Tagbilaran, Nov. [illegible] in trees along the beach from Tagbilaran to [illegible]. Common about Jolo, November 21-26, 1903.

Noted, February 16, 1904, at Micas, a Subano village on Sarangani Bay, northern Mindanao, P. I.

On an overland journey from Lake Buluan to Davao, southern Mindanao, in May and June, 1904, Captain F. R. McCoy, U.S. Army, noted the occurrence of this species in the Alip River Valley as well as on the Davao side of the mountain divide.

Abundant at Pantar. Nested in hollow trees and in [illegible] holes in the new Agno River bridge. Aug. & Sept. [illegible]

Noted from Malabang to Camp Vicars (0 to 3000) Gulf, Mindanao, March [illegible]

Seen on the upper Saraca River, around Malanan, April 6, 1904. Also seen in the woods near Huahulama's cotta, April 7, 1904.

(Sheet II.)

293. Sarcops calvus (Linnaeus).

Bald-headed ~~Starling~~ Grackle.

Noted on the Taraca River between Gulauan and Basayan, Apr. 3, 1904.

On April 9, 1904, as soon as it was light enough to see, a pair flew over my bed at Basayan, near Lake Lanao.

Numerous along the wagon-road from Camp Vicars to Malabang, April 11, 1904. Abundant, in places, along the wagon-road from Camp Vicars to Malabang, Sept. 29, 1903.

Noted at Davao, southern Mindanao, July 15 to 20, 1904.

Many seen at Mercedes, 9 m. E. of Zamboanga, Mindanao, March 28, 1906.

Abundant in heavy timber about Zamboanga.

Abundant at Pantar and Lake Lanao, Aug. & Sept., 1903.

Lubas, Libungan Valley, east of Cotabato, March 12, 1904.

Common at Lake Mainit and on the Tubay River, northern Mindanao, April 22-24, 1904.

Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Abundant from Ade's plantation to the River, eastern Mindanao, April 27, 1904.

Abundant on the Agusan River, Mindanao, from Silao to Jativa, May 6, 1904. It sometimes uttered a cry that reminded me of that of the lesser yellowlegs. [but this cry proved to be that of Halcyon gularis!]

Jativa to Butuan, Agusan River, Mindanao, May 7, 1904.

At times it is, like the Starling of Europe, a sweet singer.

293. Sarcops calvus (Linnæus).
Bald-headed Grackle.

Noted from Pantar to Marahui, Mindanao, September 27, 1903.
Lake Mainit, northern Mindanao, April 24, 1904; noted as numerous between Jabanga, on Lake Mainit, and Santiago, on the Tubay River, when Captain McCoy shot one — a laying female.
A flock noted at Compostela, on the upper Agusan River, in the interior of Mindanao, May 5, 1904.
Abued River Valley, Luzon, Nov. 30 and Dec. 1, 1905.
Camp Roseman, Tumaras Island, December 24, 1905.
Currimao, Ilocos Norte Province, Luzon, March 12, 1907.
Abundant from Naujan to Lake Naujan, eastern Mindoro, March 25, 1907.
Very abundant on Naujan Lake and Naujan River, Mindoro, March 25, 1907.
Subaan to the Benibi River, Mindoro, Nov. 2, 1906.
Benibi River, Mindoro, Nov. 3–5, 1906.
One on the Alag River, Mindoro, Nov. 7, 1906.
Scarce at Camp No. 3, ridge 2250 feet, Mindoro, November 8–12, 1906.
Specimens collected, in Mindoro, at: —
14527. ♀ad. Camp No. 11, altitude feet, at 1st crossing of the Alag River, Dec. 4, 1906.
14547. ♂ad. Subaan, Mindoro, December 5, 1906.
Balut Island, Darangani group, January 23, 1906.

Too-Kaa-ling', Moros of Basilan Island. (Sheet IV.)

Sarcops calvus calvus (Linnaeus).

Sarcops calvus melanonotus Grant.

Melanonotus was abundant at Isabella, Basilan Island, January 26 and 27, 1906, feeding largely upon papayas.

S. c. melanonotus was abundant from Isabella, Basilan Island, west to Camp No. 2, January 28, 1906.

From Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906; flies with a loud [illegible].

At Camp No. 3, Basilan Island, January 30, 1906; utters a squeaky whistle, and produces a rushing sound as it flies.

Camp No. 3 to Camp No. 4, northwest Basilan, January 30, 1906.

Camp No. 4 to Camp No. 5, northwest Basilan, January 31, 1906.

Camp No. 6 to Camp No. 7 (near Tipo Tipo), in the interior of Basilan Island, February 2, 1906.

Tipo Tipo to Camp No. 8, interior of Basilan Island, Feb. 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.

Tipu Tipu, interior of Basilan Island, February 15, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906.

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Near Malusa, west Basilan, February 19, 1906.

Camp No. 7 to Camp No. 8, Basilan Island, February 20, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's plantation, near Isabella, Basilan Id., Feb. 22, 1906.

Tee-cling', Filipinos of Samar. (Sheet V.)

Sarcops ~~sarcops~~ calvus calvus (Linnaeus) and
Sarcops calvus melanonotus Grant.

Lower Catubig River, north Samar, October 1, 1906.
Burengo, Catubig River, north Samar, October 1, 1906.
Abundant, one shot, at Lanang, east Samar, Oct. 3, 1906.
Common on Lucas Island, off northeast Mindanao, Oct. 4, 1906.
Melanonotus: Cateel and lower Cateel River, east Mindanao, October 5, 1906. Abundant, one shot.
Sulu Island, from Jolo to Bud Dajo, October 11, 1906.
Quite numerous on Loran Id., off Ubian Id., Oct. 12, 1906.
Common on Tumindao Island (off Bitanki Island), October 13, 1906.
Manuk Manka Island, January 6, 1906 (one specimen).
Very numerous at Sibutu ~~Island~~ town, on the west coast of Sibutu Island, January 7, 1906, when three specimens were collected.
Pang jang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.
Ayala, western Mindanao, August 27, 1906.
Mactan Island (off Cebu), September 3, 1906. McGregor notes a female from Toledo, Cebu Island, which "has the back rather dark and should perhaps be referred to S. melanonotus." I did not shoot any of them.)
Antipolo, Rizal Province, Luzon, September 21, 1906.

(Sheet I.)

Lanioidæ

294. Calornis panayensis (Scopoli).

Say'-o (Visayan Filipinos of Baganga, eastern Mindanao).

[illegible]

Noted at Baganga, eastern Mindanao, P. I., [illegible]

This Starling was abundant along the Rio Grande from the river mouth to Lake Lignasan. At dusk flocks were seen passing and roosting in coarse grass along the banks, appearing much like our Red-winged Blackbird.

Noted at Davao, southern Mindanao, October 2[illegible], [illegible].

Flocks were seen on the shore of Sarangani Bay, at Makar, southern Mindanao, October 2[illegible], [illegible].

West side of Lake Lanao, Mindanao, November [illegible].

Flocks were seen in the vicinity of Crater Mountain, on the island of Sulu, November 15 to 18, 1903. Flocks were seen in trees along the beach from Taglibi to Jolo, November 2[illegible], [illegible]. Enormous flocks frequented the corrals at Jolo, and swarmed in the trees within the walled city, and along the shores.

Flocks were seen at the Moro village on Dungdung Island, off Sulu, P. I., November 25, 1903.

Flocking in port of Zamboanga, Mindanao, Dec. 2, 1903.

(Sheet II.)

294. ~~Calornis~~ Aplonis panayensis (Scopoli).

Flocks were noted on Pangapuyan Island, off Mindanao, about 12 miles east of Zamboanga, Dec. 11, 1903; specimen taken December 19, 1903; again noted February 2, 1904.

Zamboanga, Dec. 7, 1903. Flocks of hundreds pass through the town and post every evening, resting on the dry tops of the tall almond-trees. Habits much like those of our Red-wing Blackbird. The flights, especially of the striped young, resemble those of the Cedar Waxwing. Very tame.

Flocks beside the Cabasaran River and residence of Datto Sali's Hasin, 2 miles from the river, southern Mindanao, January 31, 1904.

On Bulwan and Banga (Port Banga) islands, off southern Mindanao, Feb. 1, 1904.

Abundant in the trees of the city squares at Jolo, Sulu Island, P. I., February 4, 1904.

Abundant, in flocks, at Dapuloy, Mindanao, Feb. 14, 1904.

" " " " Lubungan, " "

Noted at Iligan, northern Mindanao, February 15, 1904.

Abundant in flocks at Sindangan, on Sindangan Bay, northern Mindanao, P. I., February 16, 1904. (One shot.)

Abundant at Mucas, a Subano village at the mouths of two rivers, on Sandangan Bay, northern Mindanao, P. I., February 16, 1904.

Noted on the Island of Sulu, P. I., between Datto Upa's residence and his market at Bual, February 21, 1904.

249 Sa-lan-se-own' (Filipinos of Cagayan Sulu) L. Sheet III.)
Se-lahn'-sing (Moros of Cagayan Sulu)

294. Calornis panayensis (Scopoli)

I found large flocks of these pretty birds on the island of Cagayan Sulu, in the Sulu Sea, February 25 and 26, 1904. One specimen (No. 13365 ♀ad.) preserved. Two others shot were not skinned for lack of time. They were feeding on trees bearing large red flowers.

Noted at Isabella, Island of Basilan, January 19, 1904.

Noted at Surigao, northeastern Mindanao, April 20 and 21, 1904.

" " Davao, southern Mindanao, July 15 to 20, 1904.

" " Zamboanga, western " July 24 to August 1, 1904.

A flock of four, in the Botanical Gardens, Manila, November 7, 1905, were the first I have noted in Manila.

In the town of Jolo, Sulu Isl., P. I., March 26, 1906, flocks were seen in the fire trees.

Many flocks at Mercedes, 9 m. E. of Zamboanga, March 28, 1906.

Enormous flocks roosted nightly in almond and cocoanut trees where they make almost as much noise as Minah-Birds. Jan. to April 10, 1906.

Ayala, Mindanao, P. I., April 24, 1906.

Flocks of birds supposed to have been this species were occasionally seen flying over Pantar, Mindanao, Aug. and September, 1903. Probably passing between Lanao & the coast.

Upper Libungan River to Seramaya Marsh, March 13, 1904

Rio Grande from the mouth of the Seramaya estero to the river mouth, March 14, 1904.

Lamprocorax managensis.

Zamboanga, March 5, 1904.

Abundant on Lake Mainit and the Lubay River, northern Mindanao, April 22-24, 1904.

Baganga to Christian Aldeis hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 24, 1904.

Flocks at Davila, Agusan River, Mindanao, May 6 and 7, 1904.

Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11, 1904.

Flocks at mouth of Agusan River, Mindanao, June 11, 1904.

Camp Gregg, Pangasinan Province, Luzon, July 30, 1905.

Dagupan, Pangasinan Province, Luzon, Nov. 30, 1905.

Flocks in the trees at Laoag, Ilocos Norte, Luzon, January 15, 1907.

Laoag to mouth of Laoag River, Ilocos Norte, Luzon, " "

Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.

Near Laoag Valley, below Laoag, do " " "

At Laoag, January 20, 1907, I noted this as one of the characteristic birds of the town, where flocks spent much of their time in tall tamarind trees. It was abundant in the Laoag Valley below Laoag, Jan. 20-22, 1907.

Laoag to Vintar Lake, Ilocos Norte, Luzon, Jan. 23 and 24, 1907.

In Laoag and at Paoay Lake, do Febr. 5 "

In Laoag, do " 7 "

At Bacara, do " 15 "

Flocks noted at Davila, Pasuquin, and Bacara, Ilocos Norte Province, Luzon, March 9, 1907.

Mahn-dash-e'ung, Moros of Basilan. (Sheet V.)

Lanioperca fuscogenis (Scopoli).

Lagufan, Pangasinan Province, Luzon, December 28, 1904.

From Nagillian to the coast at San Fernando, Luzon, ~~March~~ May 30, 1904.

Sibi, southeastern Luzon, June 3, 1905.

Tabaco, Albay Province, Luzon, June 4, 1905.

Common from Naujan to the Naujan River, eastern Mindoro, March 25, 1905; also on Lake Naujan and the Naujan River, March 25, 1907.

Subaan, Mindoro, Nov. 1 and 2, 1906.

Specimens: No. 14546. ♂ ad., Subaan, Mindoro, Dec. 5, 1906.
" 14549. ♀ ad. do

Very abundant around Isabella, Basilan Island, feeding with the bald-headed starlings upon papaya fruit.

Abundant, January 28, 1906, west from Isabella to Camp No. 2, Basilan Island.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

At Camp No. 3, Basilan Island, January 30, 1906.

Camp No. 3 to Camp No. 4, northwest Basilan, January 30, 1906.

Camp No. 8 to La Milan, north Basilan, February 4, 1906.

Malusa, west Basilan, February 19, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's Plantation to Isabella, Basilan Id., Feb. 22, 1906.

Lower Catubig River, north Samar, October 1, 1906.

Lamprocorax panayensis (Scopoli).

Abundant on Cajoagan Island, off north Samar, October 2, 1906, when No. 14340, ♂ im., was collected.

Large flocks were noted on the shore of Bucas Island, off Northeast Mindanao, October 4, 1906.

Abundant, 3 shot, lower Coteel River, Mindanao, Oct. 5, 1906

Sulu Island, from Jolo to Bud Dajo, October 11, 1906.

Quite numerous on Loran Island (off Ubian Island), October 12, 1906, when No. 14410, ♂ juv., was collected.

Manuk Manka Island, January 6, 1906.

Jolo, Sulu Island, January 9, 1906.

Walled city of Jolo, Sulu Island, March 1, 1906.

Maimbun, and Siet Lake Beach, Sulu Island, March 1 and 2, 1906.

, [near site of Dorey's Camp, No. 4, Jan. 30-31, 1906] west coast of Basilan Island, ~~Jo~~ March 3, 1906.

Parang Parang, southern Mindanao, March 14, 1906.

Launch ~~such~~ tied to wharf at Cotabato, southern Mindanao during night of March 14-15, 1906, when these birds chattered at night from their roosts in neighboring trees ~~Cota Bato~~ Cotabato to the mouth of the Rio Grande of southern Mindanao, March 15, 1906.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cabo Island, Igat Bay, off south Mindanao, April 2, 1906.

Lamprocorax panayensis (Deopoli).

Ayala, western Mindanao, August 27, 1906.
Abundant on Cuyo Island, Sulu Sea, September 10, 1906.
During midday the flocks are separated into small companies and seek the shade of manoc and trees, and are quite musical. They must be friendly with other birds; as I found several ringdoves, fan-tailed flycatchers, orange-breasted sunbirds and Chinese orioles all amicably resting in a ~~large~~ lone manoc tree surrounded by cogonal.

In the tall trees, many of them dead, along the white sand beach on the east shore of the Gulf of Davao at Sulug, June 12, 1904, many were seen, feeding largely along the beach, like Dusicalus. Five were killed at one shot.

Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.
Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.
Abundant at Cebu, Cebu Island, July 10, 1906.
Tacloban, Leyte Island, July 24, 1906.

Kohl-lee'-pō, Bagobos of Todaya, on Mount Apo, Mindanao.

321. Mirafra philippinensis Wardlaw-Ramsay.
Philippine Bush-Lark.
Laa'-on-pahi'-ong (Moros of Bambonga).

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.
Obtained at Malabang, Parang, and Camp Vicars, Mindanao, and seen at Cottabato, Mindanao.
Noted at Parang, southern Mindanao, October 18, 1903, when several were shot. In appearance and habits these gentle birds reminded me of Vesper Sparrows on our western plains; but their home is in open spots and roadways in the cogon grass which is too rank to suit them except where clearings have been made. Picket lines and target ranges about military posts in Mindanao are quite to their liking.
Noted at Bula, on Sarangani Bay, southern Mindanao, Oct. 24, 1903.
Common at Cottabato, Rio Grande Valley, southern Mindanao, P.I., March 3 to 5, 1904.
Noted as abundant at Camp Vicars, Mindanao (altitude 3000 feet). Two specimens taken there, April 1, 1904 (Nos. 13426–7); noted from Camp Vicars to Sonir, on L. Lanao, April 2, 1904.
Numerous on the target range, at Malabang, southern Mindanao, October 7 to 9, 1903.
Camp Gregg, Pangasinan Province, Luzon, July 29 and 30, 1905.

(Sheet II)

Mirafra philippinensis Wardlaw Ramsay.

Camp Holzenburg, Luzon, Nov. 28, 1905.

A few were seen in the neighborhood of Baguio, Benguet Province, Luzon, Dec 1–12, 1905.

Some were seen in grassy ridges at about 5300 feet, on the base of Mount Santo Tomas, Benguet Province, Luzon, December 9 and 10, 1905.

Meade Road, Benguet Province, Luzon, [illegible]

Currimao to Laoag, Ilocos Norte, Luzon, January 14, 1907.

Abundant; two shot, in sandy wastes bordering the Laoag River, among scattered weeds and grass, January 19, 1907.

Abundant in open wastes bordering the Laoag River below the town of Laoag, January 20–22, 1907.

Abundant in old rice paddies between Laoag and Vintar Lake, Ilocos Norte Province, Luzon, January 23 and 24, 1907.

Laoag to shore of Laoag Lake, do, Abundant " and Febr. 5, 27 " ; everywhere in suitable ground.

Abundant from Laoag to Nagpartian, Ilocos Norte, Luzon, Feb. 15, 1907; but only in waste places and rice stubble.

Nagpartian to Laoag, Ilocos Norte, Luzon, March 9, 1907.

In the vicinity of Baguio, Benguet Province, Luzon, Dec. 24, 1905 to Jan. 4, 1907, it was seen in grassy openings at 4000, 5000, and 5300 feet altitude; most numerous in grass lands around the base of Santo Tomas [illegible]

231 (Sheet III.)

Miriafra philippinensis Wardlaw Ramsay.

Everywhere in grassy openings on the base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

Several on the Naujan River, Mindoro, March 25, 1907.

Parang Parang, southern Mindanao, March 14, 1906.

Marigmina Valley, Rizal Province, Luzon, March 17, 1906.

Taytay and Antipolo, Rizal Province, Luzon, September 21, 1906.

308. Munia oryzivora Linnaeus.

~~Gray Java Sparrow.~~ Weaver-bird.

Abundant from Davila to Laoag, Ilocos Norte Province, Luzon, March 9, 1907; fond of bathing and of dusting in roads.

Common from Dingras to Laoag, Ilocos Norte Province, Luzon, Jan. 18, 1907.

[illegible]

This species was abundant in one locality near Zamboanga, Mindanao, especially frequenting shrubbery at the inner edge of a mangrove swamp, on the border of a large marsh. I often saw them on the ground in a road which crosses this marsh. Young recently from the nest were seen.

August 22, 1905. — Elaborate cages of bamboo, each containing six beautiful specimens of this weaver-bird, were offered for sale on the streets of Manila at $3.00 gold, cage & birds. During September, 1905, large cages filled with these birds and Excalfactoriae were for sale on the streets of Manila.

Quite numerous at Zamboanga. Resident.

Prangs to Barak, Rio Grande Valley, Mindanao. March 7-11, 1904

Common, Laoag to Vintar Lake, Ilocos Norte, Luzon, Jan. 23 and 24, 1907.

" " " Paoay " , do , " 27, 1907

Abundant between Laoag and Nagpartian, do , Feb. 15, 1907.

(Sheet 11.)

Munia oryzivora Linnaeus.

Burengo, Catubig River, north Samar, October 1, 1906.

At Zamboanga, Mindanao, January 11, 1906, a boy had a young one that was just from the nest.

Master Leonard Wood, Jr. gave me specimen No. 13997, ♀ ad., which he shot at Zamboanga, Mindanao, March 3, 1906.

(Sheet I.)

My-uh-del-ooh-mah'-tel, Bagabos of Mount Apo, Mindanao.

309. Munia jagori Mertens.

Brown Java Sparrow.

Brown Rice-Bird or Weaver-bird.

Nest of Weaver-bird or Rice-bird.

[illegible] Pantar, and breeding. Dec. & Jan. [illegible]

Seen at Zamboanga, Mindanao, P. I., October 10—16, [illegible].

" " Parang, " " " 18.

Flocks of these pretty Sparrows frequented the banks of the Rio Grande from Cotabato to Lake Sequidan, Oct. 19, 1903.

Abundant at Makar and Bula, on Sarangani Bay, southern Mindanao, October 26, 1903.

North side of Lake Lanao (vicinity of Bacolod), Mindanao, November 3, 1903.

Flocks were seen in the cogon grass around Siet Lake, on the island of Dulu, P. I., November 12 and 13, 1903; on the trail from Upa's place to Crater Mountain great flocks were noted, November 15, 1903; on Mt. Sulieman and thence to the beach at Tagibi, November 20, 1903. Jolo, November 21—26, 1903.

At Zamboanga, Mindanao, P. I., December 2, 1903. On Dec. 7, I noted: Nest globular, with entrance at the side. Eggs white. In November, two fresh eggs were taken from a nest on Lake Lanao, Mindanao, P. I. Feeds in vast flocks on grass seeds, and on rice. Sexes and ages, at a short distance, all appear alike. They sing like Bobolinks in

Chestnut Mannikin-bird or Rice-bird. (Sheet II.)

209. Munia jagori Martens.

flight over the grasstops in search of fresh pastures

Egg 16×11.5 mm (destroyed).

Residence of Datto Salis Hasin, two miles from the Cabasaran River, and six miles inland, southern Mindanao, January 31, 1904.

Flocks seen at Dipulog, northern Mindanao, P. I., February 14, 1904.

" " " Lubungan, " " " "

Noted at Iligan, northern Mindanao, P. I., February 15, 1904.

Flocks seen between Datto Upa's ~~mouth~~ residence and his marketplace, at Bual, Sulu Island, P. I., February 21, 1904.

On the island of Sulu, in the Sulu Sea, February 25 and 26, 1904, this bird was very abundant. ~~Some~~ Immense ~~flocks~~ flocks were seen on both days, in an old crater-basin, where nine (9) were killed at once in a patch of weeds ~~in~~ on the seeds of which they were feeding. [Of these seven were lost because I was unable to make them into skins in time.] Captain Langhorne, U.S. Army, who crossed the island twice on February 25, 1904, and brought me one of these birds, reported them to be found everywhere in suitable places. Specimens Nos. 13366, 13375, 13388.

In June, 1904, Captain F. R. McCoy noted this species between Davao and the ~~[illegible]~~ headwaters of Alip River, in southern Mindanao.

Noted at the Pollok Naval Station, southern Mindanao, March 2, 1904.

Chestnut Weaver-bird or Rice-bird. (Sheet III.)

309. Munia jagori Martens.

Noted at Cotabato, Rio Grand Valley, Mindanao, March 3, 1904.

" " Kudarangan, " " " 6, "

Along the military road from Malabang to Camp Vicars (o to 3000 feet altitude), March 31, 1904. At Vicars, April 1, 1904.

Abundant in the grassy country from Camp Vicars to Lomir, on Lake Lanao, Mindanao, April 2, 1904.

From Lake Lanao at Lomir to Rogayan, Taraca Valley, April 3, 1904.

In flocks at Rogayan, Taraca Valley, April 4, 1904.

Abundant on the lowest part of the Taraca River, Lake Lanao Basin, Apl. 5, 1904.

Abundant as far up the Taraca River as Galanan, April 6

At Huabulama's cotta, Taraca Valley, April 7, 1904.

A nest was seen, but not examined, between Galanan and Basayan, in the Taraca Valley, and great swarms of them at Basayan, near Lake Lanao, April 8 and 9, 1904; again at Lomir, April 10, 1904.

Many around Camp Vicars, April 11, 1904.

Noted at Isabella, Island of Basilan, January 19, 1904.

Noted at Macalini, Mindanao, September 27, 1903.

Abundant at Camp Vicars (altitude about 2900 feet), September 28 and 29, 1903; also along the road from Camp Vicars to Malabang, September 29, 1903.

In immense flocks at Malabang, Mindanao, September 29 and Oct. 7–9, 1903.

Small flocks seen on outskirts of Manila, during September, 1905.

Flocks frequented floating grassy islands, on Lake Lanao, Mindanao, May 18, 1904. May 19: "Brown Weaver-birds live all over the Lake."

Munia jagori Martens.

Chestnut Weaver-bird or Rice-bird.

Noted at Isabella, Basilan, January 19, 1904.
Enormous flocks around Paniar & L. Danao, Aug. & Sept., 1903.
Camp Marahui, Mindanao (2500 feet), September 27, 1903.
Small flocks seen in and around Manila after September 1st, 1905. Ayala, Mindanao, April 24, 1906.
Noted on the Buluan River, connecting lake Buluan and Liguasan, Mindanao, May 20 to 23, 1904; also at Lake Buluan, May 22, 1904.

Abundant all along the trail from Buluan to Simpitan and at the latter place, May 23 to 26, 1904.

Many flocks seen ~~six~~ during descent of Buluan River, from Buluan to Pandog and thence to Lake Liguasan, May 27, 1904.

Noted at Surigao and Placer, in northeastern Mindanao, April 20, 1904; also at Surigao, April 21.
Noted at Baenag, northeastern Mindanao, April 21, 1904.
Noted at Dinagat, on the Island of Dinagat, May 21, 1904.
Many flocks were seen during the ascent of the Tubay River, northern Mindanao, April 22, 1904.
Noted at Zamboanga, western Mindanao, July 24 to August 1, 1904.
" " Davao, southern " , July 15 to 20, 1904.
" " Jolo, Sulu, P. I., March 26, 1906.
" " San Ramon Farm, Zamboanga Dist., Mind., March 23, 1906.
Malanipa Id., off W. Mindanao, April 1, 1906.
Margosa Tubig, S. Mindanao, April 2, 1906.

153

Munia jagori Martens.

Abundant across the cogonal ~~[illegible]~~ that extends from Deranaya Marsh to Labas, east of Cotabato, March 12 and 13, 1904.

Piangs to Barak, Rio Grande Valley, Mindanao, March 14, 1904. Great flocks drifted over the Deranaya Marsh, between Barak and Datu Piang.

In large flocks along the Rio Grande from the mouth of the Deranaya estero to Cotabato, March 14, 1904.

Lake Mainit, northern Mindanao, April 24, 1904.

Abundant on the Dubay River, " , April 22-24, 1904.

Baganga to Christian Ade's hemp plantation, 7 miles west of Baganga, eastern Mindanao, April 26, 1904.

Abundant at Ade's plantation, April [illegible]

Three were seen near the source of the Walad River, in the East Coast Range of Mindanao, May [illegible]; at the species became abundant along the lower course of the Bacoco River, a tributary of the Agusan, May 4, 1904.

Flock noted at Trigali, on the lower Bacoco River, a tributary of the Agusan, central Mindanao, May 4, 1904.

Agusan River at Compostela, Mindanao, May 5, 1904.

Agusan River from Pilar to Nativa, Mindanao, May 6, 1904.

" " " Nativa to Patrocino, " " 7, "

Varicella, on the Agusan River, Mindanao, May 7 and 8, 1904.

(Sheet VI.)

Munia jagori Martens.

Varicella to Lake Linao, Agusan Valley, Mindanao, May 8 & 9, 1904.
Lake Linao to Talacogon, Agusan Valley, Mindanao, May 9, 1904.
Talacogon to Butuan, Agusan Valley, Mindanao, May 10 and 11, 1904.
Mouth of Agusan River, Mindanao, May 11, 1904.
Jinjanez, northern Mindanao, May 12, 1904.
Langaran, northern Mindanao, May 13, 1904.
Very large flocks at Boliangao, on Murcialagot Bay, northern Mindanao, May 13, 1904.
Camp Gregg, Pangasanan, Luzon, July 29 and 30, 1905.
San Isidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.
Camp Stotsenburg, " " " 28, "
Camp Gregg, Pangasanan Province, " " 29, "
Dagupan, " " " " 30, "
Along Manila and Dagupan Railroad from Camp Stotsenburg to Camp Gregg, November 29, 1905.
Dagupan to Baguio, Luzon, Nov. 30 to Dec. 1, 1905.
Several small flocks were seen near Baguio, Benguet Province, Luzon, Dec. 1 to 12, 1905.
Trinidad, Benguet Province, Luzon, December 3, 1905.
Meade Road, Benguet Province, Luzon, Dec. 13, 1905.
Bued River Canyon, from Colgan's through, on the Benguet Wagon Road, December 13 and 14, 1905.
Bued River to Manila, Luzon, Dec. 14 and 15, 1905.
Dagupan to Bayambang, Pangasinan Province, Luzon, Dec. 15, 1905.

(Sheet VII.)

Munia jagori Marlens.

Carrinao to Laoag, Ilocos Norte, Luzon, January 14, 1907.
Laoag to Dingras, do " 15, "
Dingras to Padgan, do " 17, "
" " Laoag, do " 18, "
Laoag to Vintar Lake, do " 23-24, "
" " Paoay " , do " 27, "
Laoag River and Paoay Lake, do Febr. 5, "
Abundant from Laoag to Naguarian, do " 15, "
" " Dairla to Laoag, do March 9, 1907.
Flocks, composed mainly of young birds, from Tagupan to Twin Peaks, Pangasinan Province, Luzon, October 23, 1906.
Legaspi, Albay Province, Luzon, March 28, 1907.
Abundant on the base of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.
Noted from Baguio to the coast at San Fernando, Luzon, ~~March~~ May 19 and 20, 1907.
A few at Camp Wallace, La Union Province, Luzon, May 20-25, 1907.
Afari, northern Luzon, May 29, 1907.
Casiguran, east coast of Luzon, June 1, 1907.
Baler, east coast of Luzon, June 3, 1907.
Tibi to Pili Hot Springs, southeastern Luzon, June 3, 1907.
Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4, 1907.

(Sheet VIII.)

Munia jagori Martens.

Flocks on Hugo Island, P.I., May 19 and 20, 1907.

Flocks from Naujan to Lake Naujan, eastern Mindoro, March 25, 1907.

Flocks on the Naujan River and Lake Naujan Mindoro, March 25, 1907.

Mouth of the Baco River, and Dubaan, Mindoro, Nov. 1, 1906.

Lower Dubaan River, Mindoro, Nov. 2, 1906.

Isabella, Basilan Island, January 27, 1906.

Camp No. 1 to Camp No. 2, Basilan Island, January 28, 1906.

Camp No. 2 to Camp No. 3, Basilan Island, January 29, 1906.

Tipo Tipo, interior of Basilan Island, February 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906.

Tipu Tipu, interior of Basilan Island, February 15, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906.

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, Feb. 18, 1906.

Malusa, west Basilan, February 19, 1906.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Musser's plantation, near Isabella, Basilan Is., Feb. 22, 1906.

Burengo, Calubig River, north Samar, October 1, 1906.

Abundant on Bucas Island, off northeast Mindanao, Oct. 4, 1906.

Lower Cateel River, east Mindanao, October 5, 1906.

Manay, east Mindanao, October 6, 1906.

Sulu Island, from Jolo to Bud Dajo, October 11, 1906.

(Sheet IX.)

Munia jagori Martens.

Siasi Island, October 12, 1906.

Siatu, Siasi Island, January 9, 1906.

Jolo, Sulu Island, January 9, 1906.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

Parang Parang, southern Mindanao, March 14, 1906.

Cotabato, southern Mindanao, March 15, 1906.

Malabang, southern Mindanao, March 15, 1906.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Mý-iah, Filipinos of Zamboanga, fide Estrellas.

Ayala, western Mindanao, August 27, 1906.

One large flock on Mactan Island, off Cebu, September 3, 1906.

Camp Connell, west coast of Samar Island, ~~Phil.~~ September 5, 1906.

Mariquina Valley, Rizal Province, Luzon, September 17, 1906.

Manila to Antipolo, Luzon, September 21, 1906.

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

Camp Overton, northern Mindanao, July 9, 1906.

Cebu, Cebu Island, July 10, 1906.

Dulag, east coast of Leyte, July 25, 1906.

Camp Overton, northern Mindanao, May 7, 1906.

(Sheet I.)

Munia cabanisi Sharpe.

Noted at Baguio-Benguet, Dec. 1 and 2, 1905.
Twin Peaks to Baguio, Luzon, Dec. 1, 1905.

A few flocks were seen on the military reserve now known as Camp John Hay, near Baguio, Benguet, Luzon, Dec. 1 to 12, 1905.

Several small flocks in Bued River Canyon, between Colgans and Camp No. 4, Benguet Road, Luzon, [illegible]
Laoag to Dingras, Ilocos Norte, Luzon, January [illegible]
Abundant, in large flocks, from Dingras to Paldan, Ilocos Norte Province, Luzon, January [illegible]
Dingras to Laoag, Ilocos Norte Province, Luzon, January 18, 1907.
Laoag to Vinter Lake, do " 23-24, "
" " Paoay " , do " 27, "
Laoag River and Paoay Lake, do February 5, "
Abundant from Laoag to Nagpartean, do " 15, "
" " Davila to Laoag, do March 9, 1907.

In a dry rice field near Laoag, January 23, 1907, I fired upon a flock of 100 and got 7. Their stomachs were filled with whole grains of rice.

Flock at Camp John Hay, Benguet Province, Luzon, Dec. 24, 1906.
Flocks, about Camp John Hay, Dec. 24, 1906 to Jan. 4, 1907, [illegible]

(Sheet II.)

Munia cabanisi Sharpe.

a constant jingling melody of chirrups, feeding in the grass and weeds, and frequently flying up into bushes or lower limbs of the pines.

Noted from ~~the~~ Baguio, Benguet Province to the coast at San Fernando, La Union Province, Luzon, Mar. 1907, 1920.

(Sheet I.)

313. Passer montanus (Linnæus).

Tree-Sparrow.

Manila, P. I., August 17 to Sept. 15, 1904; species resident; 'hundreds' were noted Sept. 15

While at Manila, Luzon, July 27 to August 1, 1903, this Sparrow was seen in abundance in the city and suburbs of Manila, frequenting the yards, parks, streets and houses, and fairly swarming in the Government corrals. I did not meet with it again until my return to Manila, August 17, 1904.

Abundant at the First Reserve Hospital Manila, P. I., Aug. 17 to 21, 1904. Came into the wards. Habits same as those of Passer domesticus, but less quarrelsome.

July 26 to August 15. — The Tree-Sparrow is as abundant and tame in the city of Manila as the European House-Sparrow is in cities of the eastern United States. At this time its plumage is faded and much abraded from wear. I saw them in abundance along the country roads for miles outside the city limits. They come into the courtyards and houses, and are less harsh-voiced than Passer domesticus. By the latter part of August the plumage was rapidly improving by the new feathering, and some well-plumed birds were seen during early September, but the change was not generally completed before the end of Sept.

(Sheet II.)

Passer montanus (Linnaeus)

Noted at Manila, July 26 to 29 and July 31 to August 4, 1905. Aug. 5 to Dec. , 1905. Resident Manila, January 12, 1907.

Abundant at Lucena, southern Luzon, March 30, 1907.

Cebu, Cebu Island, September 3, 1906.

Manila; Pumping Station; San Mateo, Luzon, September 17, 1906.

In flocks, Manila to Antipolo, Luzon, September 21, 1906.

Abundant in the town of Cebu, Cebu Island, July 10, 1906.

Noted at Manila, Luzon Island, July 15 to 18, 1906.

Unidentified species.

"Bird the size and colors of Canada Warbler" noted at Zamboanga, Mindanao, P. I., October 10–16, 1903. [Probably a young male of Blk-throated Sunbird.]

At Bayanga, eastern Mindanao, P. I., October 22, 1903, I noted a "Black bird the size of a Robin which uttered a peculiar note." ; also a "small black bird with crest."

About 100 Sandpipers about the size of Turnstone were seen at Mati, southern Mindanao, P. I., Oct. 23, 1903.

At Pantar, Mindanao in August and September, and at Parang, Mindanao, P. I., October 18, 1903, I became familiar with a Warbler-like brown bird about the size of a Nightingale, which, from its note and habits I called, in my notes, the "Yelping Grassbird." When approached as it clung to a tall spray of cogon grass it would run down the grass stems like a mouse and disappear in the cogon, whence it could not be flushed. Several were shot but could not be found in the heavy grass of the cogonals. This is not the bird I have called "Great Reed Warbler (No. 13168) in my notebooks.

On the bank of Sarangani Bay, beside a cogonal at Makar, on October 26, 1903, I saw a bird the size of a Hermit Thrush, having a big buffy head. None seen elsewhere.

(Sheet II.)

Unidentified Birds.

On the island of Sulu, P. I., my attention was called to "Weaver Birds' nests," which were made of leaves sewn together. I never examined these nests, owing to the activity of the military operations in progress; but saw several small birds in the tree resembling Sun Birds. One of these trees was on the trail that we marched from Hassan's to Upa's Cotta, on November 14, 1903.

In crossing the island of Sulu, from Upa's cotta to Crater Mountain, November 15, 1903, a "brown-and-gray Hawk" was noted.

In a camp on a stream at the foot of Crater Mountain, on the island of Sulu, P. I., on November 15, 1903, I saw a "long, green bird the size of Harpactes oreas." Perhaps it was smaller.

In a Moro field of tapioca a large, drab-gray Hawk with a whitish head, size of Duck Hawk, was seen November 25, 1903.

Yellowbreast Warblers were noted at Jolo, Sulu, November 21-26, 1903.

"Dusky, black-browed Sunbirds" were noted at Bung Bung, southern Mindanao, P. I., January 30, 1904.

January 31, 1904, on the Cabacaran River, southern Mindanao, P. I., "two birds were seen for the first time: a very small Kingfisher with a white breast, and a very small Blue Heron."

(Sheet III.)

Unidentified Birds.

Siaisay, February 4, 1904. — I saw but three species of birds on the island of Siaisay clearly enough for determination during our brief landing. Small birds were singing in every tree in the fort, but I was too busy to identify them.

While lying at anchor at Camp Overton, northern Mindanao, P. I., February 15, 1904, it rained; but it cleared sometimes, and, whenever the sun came out for a few minutes, small birds on the shore would begin to sing.

At the Subano village of Mucas, on Saran=gani Bay, northern Mindanao, February 16, 1904, a "Hawk similar to but larger than the British Sparrow Hawk (Accipiter nisus)" was noted.

Santa Maria, N. Mind., Feb. 17, 1904. Yelping large Warblers like those of Pandar and Parang; also "whistling song bird, heard at Marivelis, and various parts of Mind.

Santa Maria, N. Mind., Feb. 17, 1904, a large Hawk soared overhead uttering a note that sounded like an exaggerated repetition of the call of the American Wood Pewee. I saw and heard this bird on an Island in Davao Bay and many other parts of Mindanao, P. I.

On West Bolod Island, in the Sulu Sea, between Jolo and Zamboanga, P. I., February 21, 1904, a good many small birds were heard or seen but not identified.

(Sheet IV.)

Unidentified Species.

As I walked along the rocky shore of the island of Cagayan Sulu, February 25, 1904, a gray bird having a light spot (blue?) on the wing flew from crags above the lowest cliff, quickly disappearing around angles of the rocky shore so that I could not get a very good view of it. It was the size of Calornis panayensis and perched on dry branches, as a Kingfisher would.

On the island of Cagayan Sulu, February 25 and 26, 1904, many small birds were seen and heard in the forest and among the cocoanut trees which could not be identified. One blue-black bird flew past me that resembled our Crow Blackbird. A small Hawk, the size of the British Kestrel was quite common. Captain Langhorne, who crossed the island from north to south and returned, February 25, 1904, reported seeing "a brown Cuckoo the size of ~~Munia~~ Calornis panayensis or smaller. He also saw the small Hawk noted above, which he described as the size of Cerchneis tinnunculus (Linnaeus) or slightly larger. Feb. 26, while on a mountain ridge, two gray birds, smaller than Artamus leucogaster darted out of the bushes, and disappeared over the cliff. They were about the color of Munia oryzivora, but more slender. No others were seen.

Unidentified Species.

On Cagayan Sulu many unidentified small birds seen and heard every time I went out.

Senor Mariano de Leon, Presidente of the island of Cagayan Sulu, spoke of a "little bird that catches insects; colors, red on wings and back, bill white."

On the island of Siassi, P. I., Captain J. L. Smith, 17th Infantry, U.S.A., in 1903—'04, noted a "Chicken Hawk"; "Eagles (three kinds, the largest being known by the name of manaol [Moro]"; a "large white Heron"; a "small brown Heron"; Two kinds of birds that live in the grass [Centropus?], known as "Bangan" and "Lambal" [Moro], respectively; "Wild Pigeon that is brown tinged with green," and other species that were more easily placed.

Captain Frank R. McCoy, U.S. Army noted a "singing Wren" like the U.S. House Wren in the mountains between Davao and the head of the Celis River, Mindanao, P. I., in early June, 1904.

On a ridge of the marshy cogonal between Kudar=angan and Barak, in the Rio Grande

At Pantar, the first day I collected birds I saw a bird the size of a Glossy Starling that I supposed to be a Pucan — perhaps an unknown bird. was Halcyon hombroni

Unidentified species

A bird the size of the Philippine Trogon, seen in high forest, with brilliantly-red underparts, seen near Pantar. Doubtless a male Trogon.

Governor Bolton & Mr. Hatcher saw a bright red bird on the Gulf of Davao.

At Pantar I listed a "Slender Brown Bird."

At Pantar I saw in the heavy forest, on a vine, a small, brown-billed bird, perhaps a King fisher, but not a species seen elsewhere.

"Noisy flocking birds" flew over Pantar during September, 1903. I never was able to identify them. They appeared to be the size of Glossy Starlings or of Bald-headed Grackles.

On April 11, 1904, when I rode from Camp Vicars to Malabang, innumerable bird voices were heard from the treetops, but I could not distinguish most of them. I noted two ~~new~~ birds new to my experience: A couple of soft little brown fellows sat on a dry twig near the ground at the side of the road; they reminded me of the English Robin. A larger bird, bright red in front crossed the road in front of us and darted into the black shadow of the heavy forest timber.

On May 17, 1904, on Lake Liguasan, Mindanao, a small brown Rail was noted — same as collected by Chaplain at Kiethley.

Unidentified Birds.

Small whitish-gray birds (Flycatchers?) were seen in dry brush beside the road, between Camp Vicars and Matalung Falls, September 29, 1903; and between Matalung and Malabang, later in the day were seen a "multitude of small birds" which I could not identify.

In the divide on the mountains between Parang and Lake Buting, at the altitude of perhaps 5000 feet, was seen a bird the size of a Catbird, with harsh voice like a Jay.

Many small birds were seen and heard but not identified on the trail across the South Coast Mountains, between Parang and Lake Buting through Cararao Pass, Mindanao, Sept. 30 to Oct. 5, 1903.

On Lake Lejuasan, Mindanao, May 18, 1904, I noted: "Two larger, whitish Terns [than Hydrocheldon hybrida] flew over the lake, uttering loud harsh cries. They were smaller than Sterna bergii borneotis Bangs. (Species afterwards collected in Basilan Strait.)

Lake Lejuasan, Mindanao. May 17 to , 1904.

"A great variety of bird sounds issue from the floating grass bogs, and some days would be required to ferret out all of the ornithological secrets of this peculiar body of turf-covered water. The Rail collected (Poliolimnas cinereus) is the most common one, but I saw other kinds of Rail.

(Sheet VIII.)

Unidentified Birds.

Lake Liguasan, Mindanao, May 19, 1904. — "I think there are several species of Rail on Lake Liguasan, though only two species (Poliolimnas cinereus and Amaurornis phoenicura) were identified, during three days spent on the lake (May 17 to 19, 1904). Many strange sounds issue from the marsh veg= =etation, especially at evening and during the night (Lake Liguasan, Mindanao, May 17 - 19, 1904.)

A "large singing bird" was frequently heard, and occasional glimpses of it obtained, which I was unable to identify. It was only met with on the Buluan River, late in May, 1904.

On the Buluan River between Lake Liguasan and Lake Buluan, May 21, 1904, I noted "plenty of the larger [than Hydrocheldon hybrida] Terns, with pure white breasts, not the largest species (Sterna bergii borealis Bangs).

On the Buluan River, between Pandog and Lake Liguasan, Mindanao, May 27, 1904, I "saw many Rails having the double white strip on head (Poliolimnas cinereus), but several others seemed larger and grayer.

At Placer, northeastern Mindanao, April 20, 1904, "many small birds were seen" which were not identified.

On the Island of Dinagat, May 21, 1904, a "large, white-breasted Dicaeum was noted.

Unidentified Birds.

Landed at Dinagat, on the Island of Dinagat, April 21, 1904, and climbed to the summit of a densely-wooded hill, where Captain McCoy and I saw a reddish-brown bird the size of Agelaius, which uttered a harsh note. We also heard loud, sepulchral cry of a large wood-bird, which I never identified.

In the Zoölogical and Botanical Gardens, city of Manila, Sept. 24, 1905, I found two smashed eggs on the path, pure white. The Dove, Minah Bird and Halcyon chloris were the only birds of a size to produce those eggs ~~that inhabits~~ inhabiting the Gardens.

Several pairs of small black-and-white (males) Flycatchers (females brown) seen sitting on posts, stake, etc., at Fort William McKinley, six miles from Manila, September 22, 1905.

April 22, 1904. — "Arrived off mouth of Agusan River, Mindanao during last night. Enormous flocks of Terns and Waders constantly arising from bars at mouth of river." [a terrible hurricane passed over this region on the afternoon of the]

Later (Apr. 22), when ascending the Tubay River, I saw one "rusty-gray bird the size of a Thrush", which I have not identified.

Unidentified Birds.

When ascending the Tubay River, northern Mindanao, April 22, 1904 (the day before the great hurricane of 1904), great hordes of shore and sea birds were seen. Among them were numbers of a large Totanus or Limosa, which at a distance, during flight, exhibited "white tail and rump" (similar to the Redshank's pattern). The bird sent to Dr. Richmond, by McGregor for identification was doubtless one of the large species noted on the Tubay River on this occasion, as the size was about the same, etc.

Later in the day (April 22) I noted "Waders, especially Curlew and Godwits (?) are abundant still."

Swifts. — On the Tubay River, northern Mindanao, I noted: "Long-tailed small Swifts" and also small dusky Swifts (i.e. Collocalia fuciphaga), ~~at~~ April 22, 1904. At many places in Mindanao, especially on rivers, I noted two species of small, all dusky Swifts which were distinguishable in the air. Both were smaller than the C. whiteheadi that I afterwards collected on Mt. Apo.

The Yelping Warbler (specimen from Siassay) was abundant at the Government Experimental Farm, San Ramon, Zamboanga District, Mindanao P.I. March 23, 1906. Yelping Warbler at Ayala, Mindanao, P.I., April 24, 1906.

Bird = Pajaro (Spanish).

Bird = Pah-pan-oak' (Moros of Lake Lanao).

Bird = Iu-coo-coo'r' (Malay).

Unidentified Birds.

In the cogonal extending from the Seranaya Marsh to the Upper Libungan River, east of Cottabato, Mindanao, March 12 and 13, 1904, I saw many of the birds that I have called yellowing warblers.

On the Rio Grande at the mouth of the estero that drains the Seranaya Marsh, I noted, March 14, 1904: Floating islands covered with grassy turf, large enough to build a house upon, are floating down the river. From one a Rail, size of Virginia Rail, flew ashore. It was pale colored. Head ashen; back olivaceous, underparts yellowish [illegible]

Down down the Rio Grande, March 14, 1904, I noted: "Pair of Waders with olive bodies; red bills; size of Tur dussumieri, were seen."

April 28, 1904. - After marching all day, camped on the Bagauga River, where many bird voices were heard. One song was like that of the Large-billed Water-Thrush. On April 29 and 30, following the Bagauga River towards its source, birds were very scarce throughout this mountain region; but numerous bird voices were heard that could not be identified. Towards evening of April 30th, many small birds were heard but none could be identified.

Unidentified Birds.

Greater Sedge Warbler
Lesser " " "Yelping Warbler"
Red-faced Parrot
Red-winged Parrot
Long-tailed Swallow
Slender brown bird
Little Whitehead
Little brownbill

These are names used in an early list of Panlao birds which I have not yet placed satisfactorily

"Many small birds" ~~were~~ was noted, at the Mandayan village of Edtee, on the upper Cateel River, eastern Mindanao, May 2, 1904; also "hundreds of birds flitting above us but none seen plainly," same date.

One species of Conical was heard and seen in the cogon grass about the source of the Cateel River, in the East Coast Range of Mindanao, May 3, 1904.

A rather large brown bird, whose flight reminded me of an owl's flew from rocks in the canyon of the upper Bacoco River, a tributary of the Agusan River, near its source in East Coast Range, Mindanao, May 4, 1904.

"A black-and-white bird the size of Molotherwater" was noted on the Agusan River, between Pilar and Jativa, Mindanao, May 6, 1904.

July 25, 1905. — As we entered San Bernardino Straits, flocks of rather large whitish waders were passing

Unidentified Birds.

A brown bird, apparently a flycatcher was seen, but not shot or positively identified, on one of three little wooded islets off the southern extremity of Dibutu Island, January 5, 1906.

On the Laoag River, from Padsan to Laoag, January 17 and 18, 1907, I saw in two places, a small flycatcher having a reddish tail, once seen in bamboo between Dingras and San Miguel, once between Padsan and Dingras, which I was unable to identify. It was too small for a Rhipidura.

On Paoay Lake, February 5, 1907. — I noted: "Red head or Pochard. — Many ducks with red heads and canvas backs were seen; one shot, not recovered.

Also: "Large Hawk with shoulders white or buff, under surface of body dark; two seen."

"White-chested Hawk with long occipital plumes; one on a tree near Dairla, Ilocos Norte, Luzon, March 9, 1907."

Mr. Haight has frequently seen, near Pauay, in northern Benguet, a small grayish hawk (perhaps an Astur) "sneaking" in the oak forest.

Two Warblers resembling Acrocephalus orientalis, but much smaller, were seen in tall marsh grass in a corner of the meadow in front of Haight's ~~place~~ house, in northern Benguet, Luzon, in July, 1907.

Unidentified Birds.

On March 27, 1907, as we steamed out of the San Bernardino Straits from the westward, numbers of small white terns (Sterna). were flying about the shores of small, rocky islands containing many caves. Islands off S.E. Luzon.

An unidentified species of Anthus, different from Anthus rufulus flew up from the cogon, on the base of Mount Mayon, Legaspi side, Albay Province Luzon, March 28, 1907.

A large seabird with dark-green back was seen at Lucena, southern Luzon, March 30, 1907.

Description of Nest and Egg:

On June 5, 1907, when descending Mount Mayon, Albay Province, Luzon, at 3500 feet altitude, I found this nest, but did not see the birds:—

Egg elongate oval, 22 by 14.5 mm. Color plain olive-brown except a blotch of purplish brown 11 mm. in diameter which occupies the center of the great end.

Nest and egg sent to the U.S. Nat. Mus.

Sandpipers the size of Totanus or Glottis were seen on Huga Island, P.I., May 29 and 30, 1907, when Mr. William Dorr Carpenter shot one but did not find it.

(Sheet XV.)

Unidentified Birds.

When Messrs. Hutchinson and Merrill were on the main ridge of Mount Halcon, chopping trail, Nov. 19, 1906, at 8000 feet they found several birds of a species about the size of *Merula mindorensis*, with broad rounded tail and terminal grayish-white tips to the rectrices. These birds had a general wood-brown color, drank at a pool of rainwater, and then flew down over the mountainside.

Left Zamboanga at 10 P. M., January 19, 1906, for Palmas Island. Early in the morning, January 20th, "dark-colored sea birds" were seen, but I was sleeping and did not see them.

On Basilan Island, between Camp No. 2 and Camp No. 3, January 29, 1906, I noted "a Warbler like No. collected on Siassi Island. It was again seen at Lipo Lipo, in the interior of Basilan Island, February 3, 1906; also between Camp No. 8 and La Mitan, north Basilan, Feb. 4, 1906; also near Isabella, Basilan, Feb. 13, 1906; abundant from Camp 3 (near Lipu Lipu) to Camp 4, south Basilan, February 16, 1906; abundant from Camp No. 4 on the Buli Buli River to Camp No. 5, south Basilan, Febr. 17, 1906; also Malusa, west Basilan, Feb. 19, 1906.

Unidentified Birds

At Isabella, Basilan Island, February 13, 1906, I saw a strange pigeon: with reddish-brown breast; orange-red eyes; white chin and throat; white-tipped bill, vinaceous at base. A native girl (Filipino) had it alive taking it to Zamboanga. Size of Columba griseigularis or smaller. Compare Columba griseigularis, especially as to coloration of bill.

General Wood shot a specimen of Hypotaenidia torquata on Cajoagan Island, off north Samar, October 2, 1906; at the same time he saw running over the coral rocks in the level forest a "smaller blackish rail having red on its bill."

On Loran Island, off Ubian Id., October 12, 1906, I saw a long-billed brown bird the size of Macronous. Three shot could not be found in the jungle.

On Siasi Island, October 11, 1906, a small Flycatcher and several other small birds were shot but not recovered.

On Tumindao Island (off Sitankai Id.), October 13, 1906, though I spent half a day in the jungle I saw only one very small bird (yellowish). I heard one sweetly-singing bird, but could not find it in the forest as it always ceased singing when approached.

Unidentified Birds.

On Mannk Manka Island, off Tawi Tawi, January 6, 1906, I saw many small birds not identified.

On little mangrove tufts on coral flats off Simalue Island, January 8, 1906, I saw very small kingfishers, blue with red breasts, and a note like ~~the~~ an exaggerated Cedar Waxwing's. These may have been a Ceyx or Alcedo.

Pee-chah-goo', Moros of Siasi Island. This is specimen No. 47 [illegible], collected at Siatu, Siasi Island, January 9, 1906. This species was afterwards frequently noted on Basilan Island, giving reference to this specimen. See "Unidentified Birds, Sheet XV."

Several other species of birds were seen or heard on East Bolod Island, January 10, 1906, which could not be identified. One was a brown bird the size and color of a Hermit Thrush which I shot but could not find among the rocks and vines ~~a~~among which it fell.

On West Bolod Island, Sulu Sea, January 10, 1906, Master Leonard Wood, Jr., saw a bird the size of Rhipidura nigritorquis with a bright yellow breast, January 10, 1906.

(Sheet XIX.)

Unidentified Birds.

At Cebu, July 9, 1906, among bamboo trees on a stream beyond the cemetery were several black-and-white birds which I noted at the time as Minahs, tho' that species has not been found on Cebu, and I was doubtful at the time. Look up. Dicrurus mirabilis, Cittocincla cebuensis, and Edolïsoma alterum.

At Dulag, on the east coast of Leyte, July 25, 1906, a small brown bird, less than Pycnonotus, was plentiful. It had obsolete stripes on breast.

(Sheet I.)

Puffinus leucomelas Temminck

A great many were seen off the northwest coast of Luzon, between Bojeador and Apari, May 26, 1907.

Steaming down the east coast of Luzon from Fuga Island, May 31, 1907, these were the only birds.

Plenty off shore from Balan Island, May 27 and 28, 1907. It likes the roughest seas.

Off north shore of ~~Ty~~ Sulu Island, March 1 ~~and 8,~~ 1906.

Off east shore of Sulu Island, March 2, 1906.

Between Zamboanga and Jolo, on the Sulu Sea, March 8, 1906, flying northward.

Flock on the Celebes Sea off south Mindanao, between Zamboanga and Margosatubig, March 13, 1906.

(Sheet I.)

Fulica atra Linnaeus.

I shot one of several seen on Paoay Lake, Ilocos Norte Province, Luzon, January 27, 1907.

Abundant on Paoay Lake, February 5, 1907. When wounded it is an expert diver and sneak and very hard to recover.

(Sheet 1.)

Hypotaenidia striata (Linnaeus).
Hypotaenidia philippinensis (Linnaeus).
Hypotaenidia torquata (Linnaeus).

Hypotaenidia (No. 14744). — One seen in a high, dry field among the sand hills near the mouth of the Laoag River, Ilocos Norte Province, Luzon, January 20–22, 1907. One shot, [illegible]

Hypotaenidia (No. 14744). — Laoag to Vintar Lake, Ilocos Norte, Jan. 23–24. Some were on the margin of Vintar lake, others on dry [illegible]

Hypotaenidia (No. 14744). — Laoag to Paoay Lake, January [illegible]
" " " — do. February 5, ";
abundant on the shores of Paoay Lake.

Hypotaenidia (No. 14744). — Several near Pasuquin and Davila, and one ~~at~~ near the Bojeador light, Ilocos Norte, Feb. 15, 1907.

Hypotaenidia philippinensis. — Several were noted between Vintar and Bojeador, Ilocos Norte Province, Luzon, Feb. 15, 1907.

Hypotaenidia philippensis. — A few were seen in trails and brushy edges of fields, and especially in fields of sugar-cane, around Laoag, Ilocos Norte Province, Luzon, from January to March, 1907. Specimens collected at Laoag, January ~~22~~ 29, 1907.

Hypotaenidia torquata (No. 15000). — Not uncommon about Nagpartian, in the extreme northern part of Luzon, from February 15 to March 9, 1907.

H. H. torquata et philippinensis were both common around Laoag.

(Sheet II.)

Hypotaenidia striata (Linnaeus).
" philippinensis (Linnaeus).
" torquata (Linnaeus).

H. torquata. — One in the road near Bagpartian, March 9, 1907.
H. striata. — Lake Lanao, Mindanao.
H. philippinensis. — Sess, March 9, 1907, near Bojeador, Davila, Pasuquin, and Bacara, Ilocos Norte, Luzon.
H. striata. — I shot one near Batac, Ilocos Norte Province Luzon, March , 1907.

No. 14744, marked H. philippinensis, Fad: Iris red. Bill brownish red at base, shading to plumbeous-dark at tip. Feet and claws dark-gray. Measurements: 302; 470; 140; 75; 30; 43; 41; length, from tip of bill to end of claws, 375 mm. Gizzard contained gravel, seeds, and insect remains. Shot on a high, dry hill. It proved to be a delicious table bird. (Near mouth of Lavag River, Ilocos Norte.)

Hypotaenidia torquata. — Several were seen on Tinga Island, P. I., May 29 and 30, 1907.

Hypotaenidia torquata. — Several were seen on Cajoagan Island, off north Samar, October 2, 1906, when General Leonard Wood shot specimen No. 14339, Fad.

At Lake Lanao, Mindanao, in August and September, 1903, I saw the smallest (cross-banded, upper, speckled ~~below~~ above) of the 3 species of Hypotaenidia (striata?), which was also collected there by Chaplain (Captain) Joseph Clemens, U.S. Army.

(Sheet V.)

Macrofugia tenuirostris Bonaparte.

Davao, Southern Mindanao, July 19, 1904.

Specimen No. 13681, ♀ juv., collected July 13, 1904, near Tagulaya and Davao Gulf; stomach contained lobate (☘) berries called Boong'-ah by the Bagobos.

Large Green Pigeon

Sphenocercus australis McGregor.

A large green pigeon was seen in cages at Santo Domingo de Basco, Balan Island, May 27, 1907. On May 28, I sent Seriaco ashore to buy some of them; but he brought out to the ship two of Ceolumba griseigularis instead.

(Sheet I.)

Treron nipalensis (Hodgs.

Two shot at Dubaan, eastern Mindoro, December 6, 1906.

At Melville, Balabak Island, October 16, 1906, a male and female were shot, October 16, 1906. No. 14444, ♂ ad. preserved.

(Sheet 1.)

Polyplectron napoleonis Lesson.

At the residence of Lorenzo Miller, at Puerto-Princesa, east coast of Palawan Island, September 11, 1906, I saw a skin of this superb pheasant that had been collected in the vicinity by Sergeant ~~Neumann~~ Emanuel Newman of the Hospital Corps, U.S. Army.

Treasurer Martin, of Puerto-Princesa informed me that "peacock-pheasants" were numerous about the station, although those seen were usually brought in alive by the natives who are expert at capturing them.

(Sheet I.)

Turnix fusciata (Temminck)

One pair, in dry field near a high sandhill, on right side of Laoag River, Ilocos Norte Province, Luzon, January 20 & 22, 1907.

On February 3, 1907, I saw several on the trail from Laoag to Paoay Lake, and on the lake shore, in Ilocos Norte Province, Luzon.

One near Pasuquin, Ilocos Norte, Luzon, February 15, 1907.
Burdett Manganese Mine, extreme N.W. point of Luzon, " 18, " .

Not uncommon at Nagpartian, Ilocos Norte Province, in the extreme north of Luzon, February 15 to March 9, 1907; one shot Febr. 20th. It was frequently seen where the cogon grass had been burned from the roadside, between Nagpartian and Bangui. It is hard to flush them, as they run through the grass or stubble like mice. When closely approached in the rice stubble it lies very close, and when flushed flies straight to the nearest cover often making a flight of 100 yards without rising much above the ground; but, where ~~cover is~~ it is surrounded by good cover, it often flies high and drops suddenly, like a woodcock.

Several seen in the road near Bacara, Pasuquin, and Davila, Ilocos Norte, Luzon, March 9, 1907.

(Sheet II.)

Phoenix scutata (Deopoli).

Wuh'-uk (Igorolot of northern Benguet).

The Igorotes of the northern Benguet district, who brought me specimens, said that it was common in the cultivated lands of the Igorotes and in openings in the pine and oak forests.

[illegible] specimens were [illegible] shot, [illegible] Baguio, Benguet [illegible], during the year 1907. This species was [illegible] in [illegible] and [illegible].

A male specimen, taken on the highest part of the military reserve, at Camp Opolu, Baguio, Benguet, Province Luzon, April 30, 1907, had the abdominal enlargement thickened and edematous, and many of the feathers plucked from the belly, showing that the bird had probably been setting.

On May 5, 1907, an immature male flew over an Igorot turf fence. Mr. Mullein Dorr, carpenter, followed it and flushed it; but it immediately dropped in the grass; and, sooner than take wing again, it allowed Mr. Carpenter to catch it in hand.

Left in Bureau of Science: Specimens 14790, 14796, and 14795.

(Sheet I)

Phlogaenas crinigera (Jacq. and Pucher).
OE?

Goon-doó'-ni, Moros of Basilan Island.

Several were flushed from the trail by our little dog, between Camp No. 5 and the Cumalarang River, in the interior of Basilan, ~~January~~ February 1, 1906. The one that I saw best, on the steep slope to the Kumalarang River, ran swiftly down the trail. Our little dog flushed it, and it flew 50 yards through the forest and alighted upon a big stone, where the con=tinual bobbing of its head caught my eye. On shooting it flew away wounded.

Camp No. 6 to Camp No. 7 (near Tipo Tipo, in the interior of Basilan Island, February 2, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.

Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906.

Camp No. 8, northwest Basilan, February 20, 1906.

Camp No. 9 (Musser's place), 2 miles west of Isabella, Basilan Island, February 21 and 22, 1906.

, [near site of Dovey's Camp No. 4, Jan. 30–31, 1906] west coast of Basilan Island, March 3, 1906.

Captain James P. Jervey, of the Engineer Corps, U.S. Army, shot one at Mercedes, southwestern Mindanao, March 16, 1906.

Paloma le monte, Filipinos of Zamboanga, fide Estrellas.

(Sheet I.)

Phloeoenas luzonica (Scott).

Two were seen, running under bushes near the roadside on the bank of Red River ~~[illegible]~~ a short distance below Divine Pearl, Luzon, December 23, 1906.

(Sheet 1.)

Phlogoenas platenae Hartert.

One shot on mountain side between camps 1 and 2, north of Mount Halcon, Mindoro, Nov. 5, 1906. Very tame. Flew up upon a log and sat bobbing its head until shot.

Several seen between the Benibi River and Subaan, Mindoro, December 5, 1906, when one was collected.

One seen December 3, 1906, at the first crossing of the Alag River, Camp No , altitude feet.

(Sheet I.)

Pyrrhula leucogenys Grant.

Koo-goo'-ee or Ko'-gue (Igorotes of Benguet.)

One of 3 skins collected on Mount Malindang I compared with a Pepanto topotype in the collection of the U.S. National Museum. Some differences noted. My collection contains 5 skins from Malindang, two of which were left with the Bureau at Manila, to be returned later; also one skin from Heights. Put them together for comparison.

Only the specimen collected was seen in Benguet, but the species is familiar to Igorotes there.

Specimens:—

No. 14278

(Sheet I.)

Emberiza sulfurata Temminck and Schlegel.

Common to Laoag, Ilocos Norte, Luzon, January 14, 1907.
Laoag River from Laoag to Dingras do " 16, "
Dingras to Paddan, do
" " Laoag, do " 18, "
Abundant in the Laoag Valley below Laoag, January 20-22, 1907; as numerous as Junco hyemalis.
Common, Laoag to Vintar Lake, Ilocos Norte, Luzon, Jan. 23-27, 1907.
" , " " Paoay " , do " 27, "
Seen everywhere, hundreds of them, but dispersed, in small flocks, from Laoag to Paoay Lake, Ilocos Norte Province, Luzon, February 5, 1907; has a note like the canary-bird [illegible]
Around Laoag, Ilocos Norte, Luzon, February 7, 1907.
Numerous flocks from Laoag to Bojeador, Ilocos Norte, Feb. 15, 1907.
A flock was seen at Nagpartian, Ilocos Norte Province, Luzon, March 5, 1907. In great abundance from Nagpartian to Laoag, Ilocos Norte, March 9, 1907.

A specimen killed at Laoag January 30 had its crop filled with rice. All of those previously shot had eaten only fine grass seeds.

A few sparrows, apparently this species, were noted at Camp Wallace, La Union Province, Luzon, May 20-25, [illegible]

Specimens.— 14754, 14823, 14777, 14890, 14721, 14831, 14830, 14733, 14719, 14778, 14720, 14734, 14755, and 14735.
The above were left in the Bureau of Science, Manila.

(Sheet I.)

Loxia luzoniensis Grant.

Not uncommon in the pine forests around Baguio, Benguet Province, Luzon, December 1 to 12, 1905.

Found up to 6500 feet on Mount Santo Tomas, Benguet Province, Luzon, December ~~10~~ 10, 1905.

Zigzag Trail, above Colgans, Benguet Province, Luzon, Dec. 13, 1905.

On December 13, 1905, large flocks of crossbills were seen just above the bridge below Colgans (altitude 2500 feet). The pines there extend to the riverbank. The crossbills drank at little seeps along ledges of the riverbank. With a few small cartridges I shot 18. (Type.)

18 specimens were collected, December 13, 1905, just above the first bridge below Colgans, on the Bued River (nearly a mile below Colgans), at the altitude of 2500 feet. (At this point the pines (Pinus insularis) descend to the [illegible])

On December 26, 1906, a few were drinking in Bued River and alighting on dead limbs, at the lower border of the Pine zone, on Bued River, below Colgans, Benguet. Pine forest

Noted at Baguio, Benguet Province, Luzon, Dec. 26, 1906.

Vicinity of Baguio, Benguet, Dec. 24, 1906 to Jan. 4, 1907: Common in pines at all altitudes. It utters a shivery, tremulous note as it flies from tree to tree. Striated young were seen at this season.

On the trail from Baguio to San Fernando, Luzon, it was noted to the lower border of the pine zone, May 19 and 20, 1907.

Nij-yuh, Moros of Basilan Island (Sheet I.)

Urolonchа everetti (Swezddale).

[near site of Dorey's camp No. 4, January 30, 31, 1906]
west coast of Basilan Island, March 3, 1906.

Abundant, locally, in bushy marsh lands, near Isabella, Basilan Island, January 26 and 27, 1906, moving in large, singing flocks

Locally, in flocks, west from Isabella to Camp No. 2, on Basilan Island, January 28, 1906

Between Camp No. 3 and Camp No. 4, northwest Basilan, January 30, 1906

Tipo Tipo to Camp No. 8, interior of Basilan Island, Feb. 3, 1906

Camp No. 8 to La Mitan, north Basilan, February 4, 1906

Estrellus, a Filipino, native of Zamboanga, Mindanao calls it Myia-pah-king, and says it is common.

Moros of Basilan Island call it Nij-yuh

Tipu Tipu, interior of Basilan Island, February 15, 1906.

Camp No. 3 to Camp No. 4, Basilan Island, February 16, 1906

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906

Malusa, west Basilan, February 19, 1906

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906

Musser's plantation, near Isabella, Basilan, Feb. 28, 1906

Pucas Island, off northeast Mindanao, October 4, 1906.

Abundant at the old Spanish fort, at Tatán, Tawi Tawi Island, January 8, 1906.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Crater Lake, and Siet Lake, March 1 and 2, 1906.

(Shot 11.)

Uroloncha everetti (Sharpe).

Nay-cuh, Moros of Basilan Island.
Puerto-Princesa, east Palawan, September 11, 1906.
Antipolo, Rizal Province, Luzon, September 21, 1906.

(Sheet I.)

Spodiopsar cineraceus (Temminck).
Chinese Gray Starling.

Spodiopsar cineraceus Mearns, Philippine Journ. Sci., II, October, 1907, p. 353

At Laoag, Ilocos Norte Province, Luzon, January 25, 1907, I shot a male, the only one seen. It was alone and shy. The original entry is as follows:

14776. Spodiopsar cineraceus. ♂. Laoag. Jan. 25, 1907. Iris grayish white. Top of maxilla olive; sides of maxilla and all of mandible (except extreme tip which is olive) yellow. Feet greenish yellow; claws horn color."

Goodfellowia miranda Hartert.

Soo-cah-ling', Bagobos of Mount Apo, Mindanao.

At 6750 feet altitude, on Mount Apo, Mindanao, June 22, 1904, these birds were feeding on black berries of a tree, from which I shot seven and a pigeon.

(Sheet VI.)

Sarcops calvus calvus (Linnæus) and
Sarcops calvus melanonotus Grant.

Suling, east shore of Davao Gulf, southern Mindanao, June 12, 1904.
Davao, southern Mindanao, June 13 and 18 to 20, 1904.
Abundant at Sagulaya, on the west shore of the Gulf of Davao; June 14, 1904, when Governor Bolton shot No. 13499, ♂ ad.; also collected No. 13502, ♀ ad.

The Bagobos on the west shore of the Gulf of Davao, Mindanao, call it Too-kal'-ling.

(Sheet I.)

Eulabes palawanensis (Sharpe).

Three were shot by General Wood and Senor Estrellas at Melville, Balabac Island, October 16, 1906. Specimens: Nos. 14437 and 14438, adult males, and 14439, ♀ ad.

(Sheet)

Corone philippina Bonaparte.

Camp Overton, northern Mindanao, July 9, 1906.

Tacloban, Leyte Island, July 24, 1906.

Camp Overton, northern Mindanao, May 7, 1906.

(Sheet II.)

Anthus maculatus Hodgs.

Does not breed in the Benguet highlands. It was taken near Baguio, May 19, 1907 — the day on which Mr. William Dorn left for Camp Wallace.

(Sheet 1.)

Anthus gustavi Swinhoe.

Specimen No. 14435, ♂ad., which I collected on Cagayan Sulu Island, October 15, 1906, is the only one seen by me in the Philippines.

(Sheet I.)

Corvus pusillus Tweeddale

Two were shot on the Naujan River, eastern Mindoro, March 25, 1907. They were quite numerous, in pairs, in trees beside the river, and were very tame. Two were also seen inland on the trail to the Naujan River from the town on the coast which bears the same name. It has a very rough croak. Many were seen and two shot on the Naujan River. It was pestering the Manila Night Heron.

Specimens collected, in Mindoro, at:—

14570. ♂ad. Subaan, Mindoro, Dec. 6, 1906.

14571. ♀ad. do.

(Sheet 1.)

Manda wattersi Swinhoe.

Not uncommon around Manila, in September, 1905.
Mariquina Valley, Rizal Province, Luzon, September 17, 1906.
Pasig and ~~Tay-Tay~~ Taytay, Rizal Province, Luzon, Sept. 21, 1906.

(Sheet I.)

Motacilla cinerea Swinhoe.

One at ford of Lacag River at Laoag, Ilocos Norte Province, Luzon, February 5, 1907; returning, at evening, I saw it again.

Laoag, March 10, 1907. — This wagtail is now too fat to make good skins. Several were seen yesterday and to-day.

(Sheet V.)

Motacilla boarula melanope Pallas

No. 13956 shot on the Libuk River, south Basilan, February 17, 1906, when several were seen on the stones of the stream.

Cagayan Sulu Island, Sulu Sea, October 15, 1906.

(Sheet I.)

Anthreptes malaccensis (Scopoli).

No. 14450, ♀ad., was collected, October 17, 1906, at a Tagbanoa village, 5 miles in the interior from Bona Bona, San Antonio Bay, east Palawan.
Puerto-Princesa, east Palawan, September 11, 1906.

(Sheet I.)

Anthreptes griseigularis (Tweeddale).

Casiguran, east coast of Luzon, June 1, 1907.
Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

On Bucas Island, off northeast Mindanao, Oct. 4, 1906, Mr. Horace H. Belcher shot specimen No. 14364, ♂ ad.

No. 14364, ♂ ad, from Bucas Island and No. 14165, ♀ ad., from Mount Malindang, Mindanao, are this species. Females of griseigularis differ from females of the remaining Philippine species in having the top of the head, and back, grayer.

(Sheet II.)

Anthreptes chlorigaster Sharpe.

Tuling, east shore of Davao Gulf, southern Mindanao, June 12, 1904.
Abundant, parents leading their broods, on Samal Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.

(Sheet I.)

Anthreptes cagayanensis Mearns.

An adult female (No. 14434) was collected by the writer, on Cagayan Sulu Island, October 15, 1906. The female had not been collected, and, consequently, could not form a part of the origonal descrip=
=tion. This specimen should be described. This species is a sweet singer.

No. 14434, ♀ ad., from Cagayan Sulu Island, is this species. It is yellower above and below than a female (No. 14450) of malaccensis from Palawan Island, and the wing of cagayanensis is longer.

(Sheet 1.)

Anthreptes wigleswortbi Hartert.

In cocoa-nut palms at Jolo, Sulu Island, January 9, 1906.
Walled city of Jolo, Sulu Island, March 1, 1906.
Sulu Island, from Jolo to Maimbun, Bud Dajo,
Crater Lake, and Siet Lake, March 1 and 2, 1906.

(Sheet I.)

c. *Arachnothera flammifera* Tweeddale.

Between the Buli Buli River (Camp No. 4) and Camp No. 5, south Basilan, February 17, 1906.

(Sheet 1)

Æthopyga boltoni Mearns.
Mount Apo Sun-bird.

Kah-poi-yah-poi'-yuh or Kah-pue-yoo-ahn', Bagobo.

The adult male topotype in the Bureau of Science collection has the forehead greenish instead of blue; the yellow rump spot is greenish yellow instead of clear yellow. The mantle is more deeply tinged with golden-yellow — not so clearly green as in males from Mount Malindang. These differences may not hold when more Apo skins are examined; but all of the Malindang skins agree and are slightly different from this one Apo adult male.

On June 26, 1904, Keller shot two among huckleberry bushes at 8000 feet elevation on Mount Apo, Mindanao.

On July 5, 1904, I noted it at 8000 feet on Mount Apo, and, later in the day, saw some of them at the top of West Peak, almost the highest point on Apo.

(Sheet I.)

Æthopyga flavipectus Grant.

Estrellus shot one about red flowers of the Dichrotrichum chorisepalum Clarke, at Camp No. 5, altitude 4500 feet, on a spur of Mount Halcon, Mindoro, November 15, 1906; and a few were seen between Camp No. 6 (altitude 6300 feet) and the main ridge of Mount Halcon, some nearly up to 8000 feet, on Nov. 21 and 23, 1906.

In descending Mount Halcon, Mindoro, it was found at Camp No. 4, altitude 3300 feet, November 26-28, 1906.

Specimen: No. 14484. ♂ad. Camp No. 5, altitude 4500 feet, Mt. Halcon, Mindoro, Nov. 15, 1906.

(Sheet I.)

Æthopyga bella Iverddale

Camp Pantar, interior of Mindanao

I shot one (too badly to skin) on the Lower Cateel River, east Mindanao, October 5, 1906.
Camp Overton, northern Mindanao, May 7, 1906.

Eudrepanis pulcherrima (Sharpe).

Specimen taken on the Island of Basilan. Female. Adult female taken between Camp No. 5 and Camp No. 6, south Basilan, February 18, 1906.

(Sheet 1.)

Hypocryptadius cinnamomeus Hartert.

Que-yew-awh'-toi, Kick'-yee-k'yō, Kee-Kick'-yō, and Kō-Kick'-yō, Bagobos of Mount Apo, Mindanao.

On July, 5, 1904, I noted it at 8800 feet on Mt. Apo, Mindanao.

(Sheet 1.)

Rhabdornis minor Grant.

Near Isabella, Basilan Island, January 27, 1906.
Between Camp No. 4 and Camp No. 5, northwestern Basilan, January 31, 1906.
Camp No. 8, northern Basilan Island, February 3, 1906.
Camp No. 8 to La Mitan, north Basilan, February 4, 1906.
Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906.
Camp No. 2 to Camp No. 3 (at Sipu-Sipu), Basilan Id., Feb. 15, 1906.

Note.- Chaplain (Captain) Joseph Clemens, U.S. Army, collected at Camp Keithley, Lake Lanao, Min=
=danao a female (previously unknown. See McGreg=
=or's notice of it in Phil. Journ. Sci., II, p. 296) of Rhabdornis inornata Grant, Bull. Brit. Ornith. Club (1896), VI, p. 18; Ibis (1897), III, p. 235, pl. 6, fig 2.

Compare above with my specimen from Mount Malindang (No.) specimen of Rhabdornis.

(Sheet II.)

Sandalifaunus elegans elegans (Tesson).

December 14 (1906.) to January 4, 1907, I noted it as very abundant throughout the pine zone, to the top of Mount Santo Tomas, Benguet Province, Luzon. Usually seen in pine trees and the center of composite flocks of small birds usually including Rhipidura cyanicepsa, Lanioillas mesoleuca, Dicrurus suillustris, Hypocnemis whiteheadi, Acanthopneuste borealis, and Zosterops whiteheadi. It utters a cat-like call and many other notes.

Noted from Baguio to the Magalleanes River, Luzon, January 19, 1907.

Specimens collected, in Mindoro, at:—

14460 ♂ juv. Camp No. 3, altitude 2250 feet — Nov. 9, 1906.
14469 ♂ ad. — do — " 11, " .
14517 ♂ ad. Camp No. 9, altitude feet, where Alaguas left. Dec

(Sheet 1.)

Hylocichla albiventris Grant.

Bah-boob'-lugh (Igorotes of Benguet).

One seen at Laoag, Ilocos Norte Province, Luzon, Febr. 3, 1907.
Several pairs seen between Laoag and Paoay Lake, do " 5, "
One shot on a ridge called the Sand hills, between Laoag and Vintar, February 7, 1907.
Abundant at Nagpartian, Ilocos Norte, Luzon, February 15 to March 9, 1907. Its common note is of 4 syllables — 3 level notes followed by an emphatic whip. It also sings prettily. Some pairs mated in February, but I found no nest.
Common, in places, from Nagpartian to Laoag, Ilocos Norte Province, Luzon, March 9, 1907.
Rather uncommon at Heights-in-the-rain, northern Benguet, Luzon, July 20 to August 3, 1907; found in the oak forest.
One was shot January 3, 1907, in a pine tree at 4500 feet altitude near Lamut, Benguet Province, Luzon. Testicles greatly enlarged.
Estrellas shot 2 at Camp No. 5, altitude 4500 feet, on a spur of Mt. Halcon, Mindoro, November 15, 1906.
Not uncommon from Camp No. 5 (4500 feet) up to Camp No. 6 (6300 feet) on Mt. Halcon, Mindoro, Nov. 17–22, 1906. It utters a note like the catbirds; also a hollow chip. It was found in small numbers from Camp No. 6, up to 8000 feet on the main ridge of Mount Halcon, Nov. 21 and 23, 1906, but not near the top.

(Sheet II.)

Hylocichla albiventris Grant.

When descending Mount Halcon, Mindoro, this species was found at the Mangyan house, between camps 4 and 5, November 26 to 28, 1906. In ascending none were seen before we reached Camp No. 5, at the altitude of 4500 feet. But this signifies little, as I have found the species at sealevel in northwestern Luzon.

Specimens collected, in Mindoro, at:

14485 ♂ ad. Camp No. 5, altitude 4500 feet, Nov. ~~17~~ 15, 1906.
14486 ♀ ad. do
14498 ♂ ad. Camp No. 6, altitude 6300 feet, Nov. 19, 1906.
14501 ♂ ad. do " 25, " .
14508 ♀ ad. Camp No. 8, altitude 3000 feet, " 27, " .
14520 ♀ juv. " " 11, " " Dec. 2, " .
First plumage. Junction of and Alag rivers, at our lowest crossing of the Alag. About 400 feet.

(Sheet X.)

Artamus leucorhynchus (Linnaeus).

Todaya, 4000 feet, Mt. Apo, Mindanao, June 17, 1904.
Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.
Davao, southern Mindanao, July 18 to 20, 1904.
At camping in the Manucan River at Camp Overton, northern Mindanao, July 9, 1906, many of these birds were chasing Rollers (Eurystomus orientalis) over the river. The Rollers made a great outcry and avoided the Wood-Swallows.
Dulag, east coast of Leyte, July 25, 1906.
Camp Overton, northern Mindanao, May 7, 1906.

(Sheet I.)

Tribura seebohmi (Grant).

Sock-sick' (Igorotes of Benguet).

(One ♂ shot and several seen in thickets of the oak zone around Haights Place, northern Benguet, Luzon, July 20 to August 3, 1907.

(Sheet II.)

Acanthopneuste borealis (Blas).

Specimens taken, in Mindoro, at: Camp No. 5, altitude 2050 feet, Nov. 11; Dubaan, Dec. 6; Calapan, Dec. 8, 1906.

Not seen on Palmas Island when I landed January 21, 1906; but, on October 7, 1906, I saw several and collected a specimen: No. 14395, ♀ ad., Palmas Island, October 7, 1906. Shot at the top of the highest tree.

Lower Caleel River, east Mindanao, October 5, 1906.

Olanay, east Mindanao, October 6, 1906.

I saw some of these birds at Dandakan, Borneo, October 14, 1906.

At sea, between Dandakan Borneo and Cagayan Sulu Island, P. I., October 15, 1906, one came aboard the Mindanao, perched on chairs, on Captain Dorey's head, and, in short, made itself entirely at home aboard the ship, though he had not so much as one tail-feather.

Specimens: 14623, 14666, 14600, 14395, 14557.

Left in Bureau of Science: 14623; 14666; 14600; 14395; and 14557.

All of the specimens of Acanthopneuste in the Bureau of Science collection, in 1907, were A. borealis.

(Sheet I.)

Horornis minuta (Swinhoe).

Not uncommon in Ilocos Norte Province, Luzon, from January 16 (Laoag) to March 13 (Currimao), 1907.

Specimens: 14810; no tag, shot by Ceriaco at Currimao; 14867.

Left in Bureau of Science: 14810, 14867, and (not tagged) shot by Ceriaco at Currimao.

(Sheet 1.)

Horornis canturiens (Swinhoe).

Abundant in Ilocos Norte Province, Luzon, from January 16 (Laoag) to March 8 (Magsaysay), 1907. ~~Ilocos Sur~~ It was almost always found in bamboo hedges bordering roads and trails, though occasionally found at the edge of woods. Rare at Magsaysay March 8.

A few, usually in bamboo clumps, near the ground, at Bojeador, Davila, and Pasuquin, Ilocos Norte, March 9, 1907.

Specimens: 14883; 14758; 14835; 14718, & 15023.

Left in Bureau of Science: Nos. 14883, 14758, 14835, 14718, and 15023.

Locustella ochotensis (Midd.

On Finga Island, P. I., May 29 and 30, 1907, we found it common in cogon grass near woods. It sang at dusk of evening, flying up from the grass. Adult male No. 15209 was collected.

Shot

1

Pratincola caprata (Linnaeus).

Noted at Baguio, Benguet, Dec. 1 and 2, 1905.

Noted as abundant from Manila to Camp Gregg, along the Manila and Dagupan Railroad, July 29 and 30, 1905; mostly in marsh vegetation near the track.

Camp Gregg, Pangasinan, Luzon, July 29 and 30, 1905

Camp McKinley, Luzon, July and August, 1905

Van Vidro, Nueva Ecija Province, Luzon, Nov. 27, 1905.

Camp Stotsenburg, " " " 28, "

Camp Gregg, Pangasinan Province, " " " 29, "

Dagupan, " " " " " 30, "

Numerous on the Benguet Wagon Road, in the Bued River Valley, Luzon, Nov. 30 and Dec. 1, 1905

Not abundant in the pine forests surrounding Baguio, Benguet Province, Luzon, Dec. 1-12, 1905.

About 12 were seen around Trinidad, Benguet Province, Luzon, December 3, 1905.

Mendo Road, Zigzag Trail, and from Colgans to Camp No. 4 on the Benguet Wagon Road [illegible]

Abundant from Baguio to Dagupan, Luzon Dec. 13 [illegible]

Dagupan to Bayambang, Pangasinan, Luzon, [illegible]

One seen near Currimao, Ilocos Norte Province, Luzon, January 14, 1906; very abundant thence to Laoag.

(Sheet 11.)

Pratincola caprala (Linnaeus).

Banks of Laoag River, from Laoag to rivermouth, Ilocos Norte Province, Luzon, January 16, 1907.

Abundant from Dingras to Paoay, Ilocos Norte, Luzon, Jan. 17, 1907.

" " " " Laoag, " " " " " E. "

" in the Laoag Valley below. " , " " " " " P. ".

" do do " 20-22, ".

" from Laoag to Vintar Lake, do " 23-24, " and Feb. 5, "

" " " " Paoay " , do " 2, 1907.

" " " " Nagpartian, do Feb. 15, 1907.

Burdett Manganese Mine, NW. extremity of Luzon, " 19, ".

Fairly common at Nagpartian, Ilocos Norte, Luzon, Feb. 15 to Mar. 9, 1907.

Common at Nagpartian, increasing in numbers to abundance between Bojeador and Laoag, Ilocos Norte, Luzon, March 9, 1907. Usually in pairs. The male sings a pretty song in the air, often finishing it on a telephone wire.

Everywhere abundant from Dagupan to Twin Peaks, Luzon, Dec. 23, 1906.

Abundant everywhere from Twin Peaks to Camp John Hay; usually in pairs; once two males were seen together.

Everywhere abundant from Twin Peaks to Dagupan, Jan. 4, 1907.

From December 23, 1906, to January 5, 1907, I noted it as abundant from sea level at Dagupan to 5500 feet on Mount Santo Tomas, Benguet Province, Luzon. Very common at Camp John Hay; usually seen perched on

(Sheet III.)

Prulisoma fasciata (Linnaeus).

Low slow gleaning from the grass tufts in open places or under the pines. A quiet, gentle and very attractive little bird. The male displays three white spots conspicuously as it flies away and appears all black as it sits facing one.

At Camp John Hay, Benguet Province, Luzon, April 20, 1907, young were seen just out of the nest.

Legaspi, Albay Province, Luzon, March 28, 1907.

Abundant on the base of Mount Mayon, Legaspi side, up to 2500 feet, Albay Province, Luzon, March 28, 1907. Flew up in the air and sang.

Common at Lucena, southern Luzon, March 30, 1907.

Abundant from Baguio to the coast at San Fernando, Luzon, ~~March~~ May 14 and 20, 1907; in fair [illegible]

~~Common at San Fernando~~ Camp Wallace and San Fernando, La Union Province, Luzon, May 20 to 25, 1907.

Pili Hot Springs, near Tibi, southeastern Luzon, June 3, 1907.

Base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 4 and 5, 1907.

Marigquina Valley, Rizal Province, Luzon, September 17, 1906.

Pasig, Taytay, and ~~Antipolo,~~ Rizal Province, Luzon, Sept 21, 1906.

(Sheet I.)

Kittacincla luzoniensis (Kittlitz).

A bird the size of Sialia sialis; color black, with pure white underparts, a broad white stripe over each eye, and a small white spot on each of its white wings. It was in the woods at the edge of the stream at the ford where ~~all~~ the dames of Nagsparin were busy washing clothes, February 20, 1907. It was very tame. Perhaps the two shot, March 2 and 3, 1907, were the only ones. Two seen at Casiguran, east coast of Luzon, June 1, 1907.

(Sheet I.)

Kittocincla nigra Sharpe.

I collected one immature male specimen on a nameless ? islet of Malampaya Sound, off ~~east~~ west Palawan Island, September 13, 1906.

(Sheet 1.)

Chaimarrhornis bicolor Grant.

On January 4, 1907, when driving down the Benguet Wagon Road in the canyon of the Bued River, between Colgan's and old Camp No. 4, I saw 4 of these birds on the stones of the creek-bed. One was lying flat upon a stone surrounded by water; the others very active, flipping their tails.

(Sheet I.)

Merula mindorensis (Grant).

First seen on a spur of the main Halcon peak in Mindoro, at the altitude of 4000 feet, November 13, 1906. In descending the mountain at the end of a 12-days steady downpour of rain, it was abundant, on November 26, 1906, as low as 2000 feet on the same spur. At Camp No. 5, altitude 4500 feet it was quite common, feeding on huckleberries, ~~of the genus~~ Diplycosia merrittii Merrill. Its note is like the American Robin's. It sings very sweetly, and frequently utters a ~~loud~~ soft chuck.

Heard daily, and occasionally seen, at Camp No. 6, altitude 6300 feet, Mt. Halcon, Mindoro, Nov. 17 to 22, 1906. Its song is sweet.

Between Camp No. 6 (altitude 6300 feet) and the summit of Mount Halcon, Nov. 21 to 23, 1906, this species was seldom seen, and the highest not above 8500 feet altitude. At our camp on the divide of the main Halcon ridge, altitude 8000 feet, several were seen.

All were seen beyond the crossing of the River, altitude feet. Remarkable for the large size of its feet, the middle toe with claw almost equalling — in one individual actually — the length of the tarsus.

Specimens: Nos. 14478, 14479, 14487, 14488, 14494, all at Camp No. 5, altitude 4500 feet, Nov. 14-16, 1906.

(Sheet 1.)

Merula Kelleri Mearns
Mount Apo Blackbird.

Pō'-lō, Bagobos of Mount Apo, Mindanao.

On July 5, 1904, I noted it on Mount Apo at 7400 feet altitude; and, on July 6, 1904, I shot one on the summit. This species feeds largely upon a delicious huckleberry called Dung-ool' by the Bagobo natives of Mount Apo; also to some extent upon the copious berries of the genus (Styphelia), called Gah'-eng by Bagobos.

(Sheet I.)

Merula thomassoni Seebohm.

Igorot name: Bull'-ett or Puhl-itt' (Benguet).

(At Baguio, in the oak, Benguet Province, Luzon, from July 20 to August 3, 1907, this bird was very common, not only in the oak woods but also upon the ground in Pin. Heights fine-gardens, where its attitudes reminded us very much of those of the American robin. Its sweet song is also very similar to that of our robin.

A few were seen on Mount Santo Tomas, Benguet Province, Luzon, from 6000 feet nearly up to the summit on January 1, 1907. They were feeding on berries in company with flocks of Ixo philippensis. Captain George S. Langhorne shot me a specimen.

(Sheet I.)

Merula mayonensis Mearns

Mount Mayon Blackbird.

Merula mayonensis Mearns, Philippine Journal of Science, Vol. II, No. 5, October, 1907, p. 358.

Above 4000 feet this species was common on the base of Mount Mayon, Tabaco side, Albay Province, Luzon, June 5, 1907. It began singing before daybreak, very sweetly. It was fairly numerous on the rocky sides of the lava flow by which we ascended the mountain. It was found nearly up to the limit of vegetation, the grass zone ending, on the side we ascended at 6200 feet, above which we saw no birds — not even the hawks and swifts that usually frequent the mountain peaks, as they probably dislike the gases arising from the crater at the summit.

~~First met with~~

(Sheet I.)

Mixornis woodi Sharpe

My only specimen (No. 14320, ♂ ad.) of this bird was collected on a nameless islet in Malampaya Sound, West Palawan Island, September 12, 1906. Iris orange. Note a clucking sound. Inhabits thickets.

(Sheet I.)

Mixornis cagayanensis Guillem.

Specimen No. 14431, ♂ad., was collected on Cagayan Sulu Island, October 15, 1906, when several were in a tree loaded with vines in an opening near the house of the Collector of Customs.

(Sheet I.)

Zosterornis whiteheadi Grant.

Koo-see'-lee (Igorotes of Benguet).

A few were seen in the pines around Baguio, Benguet Province, Luzon, Dec. 1-12, 1905; and it was abundant on Mount Santo Tomas, a few miles distant, December 10, 1905, when I obtained several specimens.

Up to 7000 feet on Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

Abundant at Heights-in-the-rain, Benguet Province, Luzon, July 20 to August 3, 1907.

From December 24, 1906 to January 4, 1907, a few were seen, in pines, at Camp John Hay; and it was abundant at the opening at the foot of Santo Tomas Peak, ascending to the mountain-top (7 feet).

From Baguio nearly down to Subiaan, Luzon, ~~March~~ May 19, 1907. Like the crossbill its range appears to be limited to the pines and oaks of the higher region.

(Sheet I.)

Zosterornis capitalis (Tweeddale).

Between Camp No. 6 and Camp No. 7 (near Tipo-Tipo), in the interior of Basilan Island, February 2, 1906.

(Sheet I.)

Brachypteryx poliogyna Grant.

Bee'-do or Bee'-doo (Igorotes of Benguet).

At Haight's-in-the-oaks, Benguet Province, Luzon, August 1, 1907, an Igorote brought me a female (No.) which he had snared on its nest. He also brought the nest, which contained one egg, measuring 24 by 16.5 millimeters. General ~~ground~~ color of egg grayish brown; ground color gray-brown, thickly and uniformly smeared with brown, obscuring the ~~back~~ ground color; great end nearly all brown. Nest outwardly of moss, lined with broad grass blades, skeleton leaves, and fine rootlets. Its measurements, taken at the fire, are as follows: external diameter, 140 mm.; internal diameter, 55 mm.; external depth, 110 mm.; internal depth, 85 mm.

Brachypteryx is one of the most elusive birds that I have met with. One will dart across the trail and alight in one of the tangles of brushwood and fallen timber that it delights to inhabit. The instant it alights it hops to a lower level where its flitting tail appears for an instant like the parting twitch of a prairiedog's tail as it changes ends and salutes in disappearing within its burrow. One awaits in vain its reappearance; for the chances

(Sheet II.)

Brachypteryx poliogyna Grant.

are largely in favor of its being far down the hillside inspecting the hollow of some decayed stump. Most of my specimens of this genus have been taken in small traps baited for mammals with a pinch of oatmeal, usually such as were placed in hollows of decayed trees or in cavities among rocks. It is crepuscular, its sweet, high notes shrilling up and down the scale at dusk, when it is much more apt to appear abroad than during the hours of sunshine. Except a wing, I never saw one more than a yard above the ground, on which it runs at an amazing pace.

Single birds were occasionally seen in heaps of fallen, mossy timber in the darkest parts of the oak woods, frequently on level ground. Its notes are sufficiently peculiar to attract attention. Its common call is a single sharp chip.

In ascending Mt. Halcon, Mindoro, it was first met with, November 13, 1906, at 3000 feet altitude, on a spur below Camp No. 5. It ran upon the ground like a mouse. Several were seen in the vicinity of Camp No. 5, altitude 4500 feet, November 13–17, 1906.

Quite often seen at Camp No. 6, altitude 6300 feet, Mt. Halcon, Mindoro, Nov. 17–22, 1906. One was trapped in shrubbery (Cyclone

(Sheet III.)

Brachypteryx poliogyna Grant.

It was occasionally noted all along the trail made from Camp No. 6 (altitude 6300 feet) up to the summit of Mount Halcon, Mindoro, November 21 to 23, 1906. It was seen very near the actual summit.

One male (No. 14497), from Mount Halcon at 6300 feet, closely resembles males from Irisan, Benguet Province, Luzon, and differs only in being of a brighter and bluer coloration; but my bird was killed November 18th, and McGregor's in June, which may account for the darker and grayer coloration of the Luzon ~~birds~~ specimen. Both have the same amount of white above the eye.

See Grant's note on a female collected in Mindoro by Whitehead, in Ibis, Oct., 1896, pp. 466 and 467.

Females must be collected before a proper comparison can be made with Brachypteryx poliogyna of Luzon.

Brachypteryx.

An adult male and an adult female from the summit of Mt. Malindang, N.W. Mindanao, are very much darker than specimens of B. poliogyna Grant, from Pisan, Benguet Province, Luzon. The two species are very clearly distinct. The white concealed supraorbital spot is very much more restricted.

(Sheet I.)

Brachypteryx mindanensis Mearns.
Mount Apo Shortwing.
Boor-roo-wing or Loog-bah'-tong, Bagobos of Mount Apo, Mindanao.

(Sheet 1.)

Leonardina woodi Mearns.

Bagobo Bird.

Doo-roogh-bah'-tong, Bagobos of Todaya, on Mount Apo.

The bird giving voice to such a prolonged gush of song at Camp Goodfellow, altitude 6000 feet on Mount Apo, in June and July, 1904, was called Doo-roogh-bah'-tong by the Bagobos who came up from Todaya; but I was unable to get a specimen at Camp Goodfellow, although its song was heard daily. During the days spent with Datto Munguh at Todaya, I saw one run across the trail, and set some mammal traps beside a fallen tree, in which one was taken.

(Sheet I.)

Pseudotharrhaleus caudatus Grant.

Suck-suck' or Suck-sook' (Igorotes of Benguet).

At Haights-in-the-oaks, Benguet Province, Luzon, this bird inhabits the most intricate ~~thickets~~ and darksome places in the alpine forests. It is more easily shot than Brachypteryx, because it does not forsake its haunts when approached, and because its raspy chirp, followed by a low trill, is continually heard as the bird almost constantly moves about the intruder. I have sat for half an hour waiting for a shot; but so nimbly does it run upon the ground and branches of its bushy home that it is as difficult to shoot as a forest mouse. It utters utters a loud, clear cooing at rare intervals.

[Note on Pseudotharrhaleus. -- A nest, supposed to be of the species of this genus there collected, was discovered in a mass of long, soft moss growing upon a tree-trunk, about 4 feet ~~from~~ above the mossy turf at the apex of Mount Malindang, Mindanao. I sent this nest, which was empty, to the U.S. Nat. Mus.] (At Haight's it lived in pairs in wooded, bushy ravines, where the tree-trunks are thickly covered with moss. It has a sweetly whistled ~~note~~ song and a hard call note, always keeping on or near the ground.

Pseudotharrhaleus griseipectus compared with (Sheet 11.)
Pseudotharrhaleus caudatus Grant.

An adult male from Mount Malindang summit is widely different from two adult males from Trisan, Benguet Province, Luzon, P. I., May 12 and 22, 1903. Collected by R. C. McGregor and A. Celestino. Labelled P. caudatus.

General coloration more saturated. Upper parts more reddish. Sides of head browner (less grayish). Chin and middle of throat less white, the feathers having darker central spots. Gray on middle of breast much more restricted, and heavily spotted with black on fore part of chest. (These spots are entirely absent in P. caudatus.) Median area of belly brownish white instead of gray. Flanks and crissum nearly as deep brown as the back.

Compare with female type of P. griseipectus from Apo.

(Sheet I.)

Pseudotharrhaleus griseipectis Mearns.

Gray-breasted Wood-Accentor.

Doo-roogh-bah'-tong, Bagobos of Mount Apo, Mindanao.

(Sheet I.)

- *Pycnonotus cinereifrons* Tweeddale.

Noted from Bona Bona, on San Antonio Bay to a Tagbanoa village, 5 miles in the interior, east Palawan, October 17, 1906.

~~Parang Parang, Southern Mindanao, March 14, 1906.~~

(Sheet XII.)

Pycnonotus goiavier (Scopoli).

Very abundant at Davao, southern Mindanao, July 18 to 20, 1904.
Cotabato, southern Mindanao, July 23, 1904.
Duluq, east coast of Leyte, July 25, 1906.

(Sheet I.)

Hypsipetes fugensis Grant.

Hypsipetes fugensis Grant, Bull. B. O. C., V, p. II, 1895.

We found it abundant on Fuga Island, P. I., where it was noted as shy and restless. Sitting on a dry top of tree, it utters a note like that of Coutopus virens; suddenly it takes to flight, at the same time pouring out a flood of vituperative notes as it curves about over the treetops. Later, it may be seen to silently swoop silently upon a bough close to the human intruder upon its solitude and eye him cautiously, suddenly to become alarmed and fly away with another succession of screams. About the houses they were less shy. We shot five (5).

(Sheet I.)

Hypsipetes batanensis Mearns.
Batan Red-eared Bulbul.

Hypsipetes batanensis Mearns, Philippine Journal of Science, Vol. II, October, 1907, p. 357.

This Bulbul is abundant and noisy everywhere on Batan Island. ✓

✓ At Dandakan, Borneo, October 14, 1906, I saw a bird which I suppose to have been Hypsipetes malaccensis Blyth.

(Sheet 1.)

Pericrocotus marchesiae Guilemardus.
Minivet.

Sulu Island, from Jolo to Maimbun, Bud Dajo, Traler Lake, and Dict Lake, March 1 and 2, 1906.

Pericrocotus

Minivet.

One noted at 1500 feet altitude on the slope of Mount Mayon, Legaspi side, Albay Province, Luzon, March 28, 1907.

(Sheet I.)

Pericrocotus

Minivet.

"A yellowish bird, size and color of ♀ Dunnock "Sanager" was noted on the Agusan River, Mindanao, between Talwa and Patrocino, May 7, 1904.

Before I saw Mr. paper on Goodfellow's last Apo collection, I wrote the following description:

Pericrocotus mindanensis new species.

Type.—No. 14107, Mearns Collection. Adult Male from Catagan, Mt. Malindang, Mindanao, P. I. Altitude 1100 feet. 1906.

Characters.—Similar to Pericrocotus novus, but smaller, the wing measuring 6 millimeters less and the tail 10 millimeters less in length. ~~Color~~ Pattern similar, but color of the orange areas paler and yellower, especially as to the rump, which lacks the reddish shade. Bill narrower (Type compared with an adult male, No. 2500, Philippine Museum collection, taken May 7, 1903, at Trisan, Benguet Province, Luzon, P. I., by Richard C. McGregor and A. Celestino).

Remarks.—Three specimens were obtained at the type-locality: An immature male (No. 14182)

Pericrocotus

is similar to the female of Pericrocotus novus McG. except that orange feathers are appearing on the breast, rump, upper tail-coverts, and tail, re= =placing the yellow feathering of the earlier plumage; and a few black feathers are showing among the yellow on the under side of the head, and on the dark gray of the upper side of the head.

Female (No. 14097).—Possibly this is not a female but a younger male ~~as~~ than the preceding, as some of the tail-feathers are shaded with orange, and there is an orange cast to the breast and rump which are lacking in Luzon females of P. novus; but there are no black feathers on under side of head. The mantle and upper side of head and neck are drab-gray, without pale edging to the feathers.

(Sheet I.)

Pericrocotus igneus Blyth.

One female noted near Bona Bona, San Antonio Bay, east Palawan, October 17, 1906.

Pericrocotus ceylensis Steere

At Burengo, on the Catubig River, north Samar, October 1, 1906, I shot 4 from one tree — a male and 3 females. Two could not be found in the jungle. The male, which was lost, appeared to be of an intense orange color, nearly as fiery orange as the Palawan species, *Pericrocotus igneus* Blyth. Specimens: Nos. 14328, 14329.

(Sheet 1)

477 *Pericrocotus cinereus* Lafr.

Manila Botanical Garden, Aug. 21, 1904. — "Pair of birds, size and shape of Mockingbirds. White outer tail-feathers, voice of cat; sit on telegraph wires daily." (Aug 17 to 21, 1904, while I was in military hospital.)

(Sheet I.)

Edoliosoma mindanense (Tweeddale).

Specimen No. 13952 seems to be this species. It was taken near Camp No. 2, interior of Basilan Island, February 14, 1906, when several were seen.

(Sheet I.)

Malindangia mcgregori Mearns
McGregor's Cuckoo-Shrike.

Malindangia mcgregori Mearns, The Philippine Journal of Science, II, No. 5, October, 1907, p. 355.

Type locality. — Mount Bliss, Malindang group (altitude 5750 feet), northwestern Mindanao, Philippine Islands.

Specimens of Malindangia mcgregori: —

No.		
14130.	♂ ad. May 15. Iris red. Bill black. Feet black, with under side of toes yellow.	
14178.	♂ ad.	239; 340; 113; 117; 19; 23; 20
14215.	♂ ad.	
14176.	♂ ad.	236; 335; 110; 108; 19.5; 24; 21
14175.	♂ ad.	240; 342; 111; 112; 19; 23.5; 21
14235.	♂ ad.	
14248.	♀ ad.	
14228.	♀ ad.	
14229.	♀ ad.	
14177.	♀ im.	230; 330; 108; 111; 19; 23; 21
29.	♀ ad.	
36.	♂ ad.	
41.	♂ ad.	
37.	♂ ad.	
40.	♂ ad.	

Soft parts of Nos. 14175–78: Iris reddish brown. Bill black throughout. Feet plumbrous-black with yellow soles.

(Sheet I.)

Eumyias nigrimentalis (Grant).

Too-yuh'-ree (Igorotes of Benguet).

A conspicuous, sweet-voiced bird, often seen in the oak woods at Haight's place, in northern Benguet, Luzon, from July 20 to August 3, 1907.

One, between Twin Peaks and Colgans, near the Cattle, on the Benguet Road, December 24, 1906.

From December 24, 1906, to January 4, 1907, one was seen near Twin Peaks, one near old Camp No. 4, on the Benguet Wagon Road, one near Camp John Hay, and one at 7000 feet on Mount Dano Lomas, Benguet, Luzon.

"The two Benguet specimens have the crissum white, not stained with buff, as in the 6 skins from Mt. Halcon, Mindoro; otherwise they are similar, although the Benguet skins are perhaps a trifle paler blue. On more careful ~~at~~ comparison, I find skins in the collection of the Bureau of Science, from Dresan, Benguet, with buffy wing linings and crissum, and, also, one Halcon skin with white wing lining and crissum. Therefore, the most one can say is that there is a tendency to buffy wing linings and crissum in Halcon specimens and to pure white in those parts in specimens from the Luzon highlands; but individual variation completely covers and extinguishes this slight difference in both series."

(Sheet 1.)

Hypothymis superciliaris Sharpe.

Near Isabella, Basilan Island, January [illegible]

Camp No. 3, Basilan Island, January 29, 1906.

Specimen No. 13934 collected on the Cumalarang River, interior of Basilan, February 1, 1906.

Camp No. 6 to Camp No. 7 (near Tipo Tipo), in the interior of Basilan Island, February 2, 1906.

Tipo Tipo to Camp No. 8, interior of Basilan Island, Feb. 3, 1906.

Camp No. 8 to La Mitan, north Basilan, February 4, 1906

Isabella to Camp No. 1, interior of Basilan Id., Feb. 13, 1906.

Camp No. 1 to Camp No. 2, interior of Basilan Id., Feb. 14, 1906

Camp No. 2 to Camp No. 3 (at Tipu Tipu), Basilan Id., Feb. 15, 1906

Camp No. 5 to Camp No. 6, south Basilan, February 18, 1906.

Near Malusa, west Mindoro, February 19, 1906

Camp No. 7 to Camp No. 8, Basilan Island, February 20, 19[illegible]6; specimen No. 13970 collected.

Camp No. 8 to Camp No. 9 (Musser's), north Basilan, Feb. 21, 1906.

Pangpang, on Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cryptolopha nigrorum (Moseley).

Pil-lee'-ton (Igorotes of Benguet).

Numerous at the summit of Mount Santo Tomas, Benguet Province, Luzon, December 10, 1905.

During my delightful stay, from July 20 to August 3, 1907, at Heights-in-the-oaks, northern Benguet, Luzon, this pretty little flycatcher was the most abundant bird. Its smart chee-a-wip was continually repeated from the shrubbery or the high treetops; and its incessant activity made it conspicuous as well as abundant. It is gregarious, appearing in numbers with mixed flocks of titmice, nuthatches, silvereyes, etc., that one so frequently meets in the oak woods of the Philippines.

Very abundant December 31, 1906 and January 1, 1907, on Mount Santo Tomas, Benguet Province, Luzon, from 6000 feet up to the summit.

Speaking of 4 skins from Santo Tomas, Benguet: "I can see no difference between these and three from Mt. Halcon, Mindoro."

Quite numerous at Camp No. 4, on a spur of Mt. Halcon at the altitude of 4500 feet, Nov. 13 to 17, 1906.

Of frequent occurrence at Camp No. 6, altitude 6300 feet, Mt. Halcon, Nov. 17-22, 1906; flock seen at 6650 feet, Nov. 25, 1906.

Its note resembles that of a Pardaliparus elegans.

(Sheet 11.)

Cryptolopha nigrorum (Moseley).

It was observed, Nov. 21 to 23, from Camp No. 6, altitude 6300 feet up to the summit of Mount Halcon, Mindoro, altitude 9000 feet.

"Three specimens of Cryptolopha (Abrornis ? Hodgs.) are smaller, much greener above, and yellower below than a series taken in Benguet Province, Luzon, during April and May; but the color difference may be seasonal. The Halcon series averages about 5 millimeters less in wing measurement." Benguet specimens taken later (January) are indistinguishable from these.

Specimens taken, in Mindoro, at: Camp No. 5, altitude 4500 feet, Nov. 16; between Camp 6 and Camp 7, altitude 6650 feet, Nov. 25.

The series from Mount Malindang, Mindanao, somewhat different from one Apo specimen in the Bureau of Science collection. The Malindang series should be compared with the Apo series in the U.S.N.M.

A Mount Halcon series of Cryptolopha nigrorum is like 4 skins from Mt. Sto. Tomas, Benguet Province, Luzon Island.

Cryptolopha mindanensis Hartert.

Behr-riss-behr'-riss, Bagobos of Mount Apo, Mindanao.

Cryptolopha mindanensis from Mount Apo, Mindanao should be compared with the series from Mount Malindang, Mindanao. (See note under card-sheet No. II, of Cryptolopha nigrorum.)

All of the specimens of Cryptolopha should be compared together. There are series from Apo, Malindang, Mindanao; Halcon, Mindoro; and Benguet Highlands of Luzon.

See "Ibis", 1891, p. 47, pl. II, fig. 1 for description of C. nigrorum.

Hodgson has separated Abrornis from Cryptolopha. Mc Gregor and Worcester have placed mindanensis in the genus Cryptolopha and nigrorum under Abrornis. They seem to differ but slightly. Look up the characters of the genus Abrornis.

The Malindang series of 3 specimens may be separable from the Mount Apo typical C. mindanensis.

(Sheet I.)

Hemichelidon ferruginea Hodgs.

One shot, November 13, 1906, beside a house of the Mangyanes, on a spur of Mount Halcon, Min=
=doro, at the altitude of 3000 feet. It perched on low sticks, uttered a sharp call note, and continually fluttered its tail. Specimen No. 14475, sex undetermined.

Terpsiphone nigra McGregor.

Mr. William Dorr Carpenter shot one of these long-tailed birds, when hunting toward the Yriaya Mountain, Batan Island, May 27, 1907; but the bird fell where it could not be recovered.

Mr. Richard C. McGregor subsequently collected a good series of this species which he described

Terpsiphone nigra McGregor, Philippine Journal of Science, II, October, 1907, p. 340, pls. I, II, and III.

Geographical distribution. — Batan and Y'Ami islands.

Pitta erythrogaster Temminck.

I collected two at 1100 feet altitude on the base of Mount Malindang, Mindanao; and Chaplain Joseph Clemens collected it at Camp Keithley (altitude 2200 feet), on Lake Lanao, ~~in the interior of~~ Mindanao.

(Sheet I.)

Pitta atricapilla Lesson.

I collected one specimen at Zamboanga, Mindanao.

(Sheet 1.)

Sarcophanops steerei Sharpe.

Oo-ah-ó-ah, Jacanes and Moros of Basilan Island.

I first met with this singular bird a few miles west of Camp Pantar, near the Agus River, in the interior of Mindanao. The bird was near the ground, in a heavy forest; and, when shot, fell into a crevice covered with vines where I could not reach it.

Several were seen, and a specimen collected (No. 13923), between camps 2 and 3, Basilan Island, January 29, 1906.

Cumalarang River to Camp No. 6, interior of Basilan Island, February 1, 1906; called Oo-ah-ó-ah by the Moros and Jacanes of Basilan.

Nos. 13936 and 13937 were collected between Camp No. 6 and Camp No. 7, in the interior of Basilan Island, Feb. 2, 1906.

Buli Buli River to Camp No. 5, south Basilan, Feb. 17, 1906.

Camp No. 5 to Camp No. 6, south Basilan, Feb. 18, 1906, when No. 13960 was collected.

When McGregor's Basilan Island collection arrived at Manila I noted: "All my Basilan skins of Sarcophanops were males. The female is pure white below."

(Sheet I.)

Yungipicus leytensis Steere

Several seen at Burengo, Catubig River, north Samar, October 1, 1906, when No. 14,327, ♂ ad., was collected.

(Sheet II.)

Yungipicus validirostris Blyth.

At Salomague, Bojeador to Davila, Ilocos Norte, March 9, 1907.

At Baguio and Camp John Hay, Benguet Province, Luzon, December 24, 1906 to January 4, 1907, it was quite common in pine woods, generally always associated with titmice and other small birds. Its peculiar cry and undulating flight serve to locate it at a long distance.

One shot on the ~~Naujan~~ Naujan River, eastern Mindoro, March 25, 1907.

(Sheet I.)

Siga everetti Inverddale

Not uncommon at Melville, Balabak Island, October 16, 1906, when No. 14442, ♂ ad., was collected.

(Sheet 1.)

Chalcococcyx xanthorhynchus (Horsfield).

My only specimen was collected at Datu Amib's place at 1100 feet elevation on the base of mount Malindang, northwestern Mindanao.

It is identical with specimens collected by Mc Gregor at Puerto-Princesa, Palawan; on the Rio Baco, Mindora; and at Isabella, Basilan Island.

(Sheet I.)

Surniculus velutinus Sharpe

Near Isabella, Basilan, January 26 and 27, 1906.

Camp No. 1 to Camp No. 2, west of Isabella, Basilan Island, January 28, 1906.

Between Camp No. 3 and Camp No. 4, northwest Basilan, January 30, 1906.

This species is not uncommon in the northwestern part of Basilan, living for the most part in areas covered by second-growth timber.

(Sheet I.)

Hierococcyx sparverioides (Vigors)

~~Midanao~~ Near Padsan, Ilocos Norte Province, Luzon, January 17, 1907, one flew from the bamboo ahead and alighted in the road behind our galloping ponies.

One on Pasay Lake, Ilocos Norte Province, Luzon, February 5, 1907.

In April, 1907, at Camp John Hay, Benguet Province, Luzon, its loud, 3-syllable notes were heard at morning, evening, and occasionally during the night, uttered from the tall pine tops.

Hierococcyx fugax (Horsford).

Noted on the Tubay River, northeastern Mindanao, April 24, 1904.

Agusan River, below Lake Linao, Mindanao, May [illegible]

On the beach at Dingras and Pudsan Ilocos Norte Province, Luzon, January 17, 1907.

In Mindoro, the only specimen taken was No. 14535, ♀ ad., near Subaan, December [illegible].

~~Mr Henry~~ My Hawk-like Cuckoo from San Roque, near Zamboanga is Hierococcyx fugax. Sparveroides is quite different.

(Sheet III.)

Cacomantis merulinus (Scopoli).

Kay-uh-doo'-deen, Bagobos of Mount Apo, Mindanao.

This Cuckoo was almost continually whistling its "please come here" call, during my stay at Camp Goodfellow, at 6000 feet on Mt. Apo, June & July, 1904.

Cypselus pacificus

I collected 9 on Batan Island, in the vicinity of Santo Domingo de Basco, May 27, 1907. Later, in the Bay, Mr. McGregor and ~~Mr.~~ Senor Celestino shot 3 more of these swifts — a genus new to the Philippine Islands. Very abundant. Nesting place not seen.

(Sheet VI.)

Hydracorax mindanensis (Inwardale).

Abundant above Todaya (4000 feet), Mount Apo, Mindanao, June 17, 1904.

In descending Mt. Apo, Mindanao, July 10, 1904, it was first met with at the altitude of 4225 feet.

Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

(Sheet I.)

Hydracorax hydracorax (Linnaeus).

Bued River Valley, above Twin Peaks, Luzon, November 30 and Dec. 1, 13, and 14, 1905.
Padsan, Ilocos Norte Province, Luzon, January [illegible]
(At Twin Peaks, Luzon, it was [illegible] Dec. 13, 1906, at which season a female was also said to be breeding in a dead stub.

In descending by the trail from Baguio to Camp Wallace, Luzon, ~~March~~ May 19, 1907, it was first heard at the lower border of the pine forest, above Sablaan; and some were seen at Sablan.
Casiguran, east coast of Luzon, June 1, 1907.
Marble Canyon above dam site and tunnel, Rizal Province, Luzon, September 17, 1906.

(Sheet I.)

Hydrocorax semigaleatus (Tweeddale).

Several flocks were seen, at Burengo and other points on the lower Catubig River, north Samar, October 1, 1906; its voice seemed exactly like that of *H. mindanensis*.

(Sheet VII.)

Eurystomus orientalis (Linnaeus).

East shore of Davao Gulf, southern Mindanao, June 12, 1904, when specimen No. 13494, ♂ ad., was collected at the Moro town of Suling.

Abundant at Tagulaya, on the west shore of the Gulf of Davao, June 14, 1904, when Governor Bolton shot No. 13498, ♀ ad.

Tagulaya (sea level) to 1030 feet altitude on the trail to Mount Apo, southern Mindanao, June 15, 1904.

Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

Davao, southern Mindanao, July 18 to 20, 1904.

At Camp Overton, northern Mindanao, July 9, 1906, flocks of Wood-Swallows (Artamus leucorhynchus) chased the Rollers, the latter making a great outcry and avoiding the Wood-Swallows.

(Sheet I.)

Anthracoceros montani (Oust

One seen flying on Sulu Island, near Bud Dajo Peak, October 11, 1906.

(Sheet I.)

Bolbopsittacus lunulatus (Scopoli).

A few seen at Nagpartian, Ilocos Norte Province, Luzon between Feb. 15 and Mar. 9, 1907; specimens taken February 23 and March 4.

(Sheet I.)

Tanygnathus everetti Tweeddale

In the museum of the College of Santo Tomas, January 9, 1907, I noted as follows:—

"Tanygnathus everetti.—Three specimens. No black spots and very little yellow edging to feathers of shoulders and wing-coverts. Two are turned so as to conceal the rump; one shows a bright blue rump. Chin, throat, and upper breast yellower than in T. lucionensis, except in a young bird which is all green below. In these 3 mounted specimens of T. everetti the tail is no yellower than in T. lucionensis."

(Sheet I.)

Tanygnathus

"In the museum of Santo Tomas College, Manila, I noted: "A large parrot with huge, red bill, from Moluccas, is is somewhat like my Balut Island female specimen."

Sarangani Island, off southern Mindanao, January 23, 1906.

Abundant, January 23, 1906, on Balut Island, Sarangani group. It ranged from sea level up to the summit of the main ridge of mountains at 2000 feet level. Moved about in small flocks uttering loud screams. Several were shot but only one of the dead birds could be recovered:

No. 13893, ♀ ad. Balut Island, January 23, 1906. Measurements from fresh specimen: 425; 770; 260; 160; 49; 25; 40 millimeters. Bill red. Iris pale yellow.

On October 8, 1906, I again spent a day on Balut Island. This large, red-billed, blue-rumped parrot was again the special object of pursuit. Two were wounded, but none brought to bag. The bird screams loudly as it flies over the treetops. It is very shy. When followed it persistently resorted to the tallest trees, where it was almost beyond the range of shot. Added to this, the bejuco jungle made it difficult to get through the ~~jungle~~ forest or to see the birds.

"My Balut Island blue-rumped Parrot is a species new to the Philippines. It is too large for Tanygnathus everetti and yellower below."

On Palmas Island, January 21, 1906, we saw two hawks about the size of Cooper's, with somewhat shorter tail, and heavily cross-barred below. They were quite shy. Both were shot at and wounded, but neither was secured. I have seen a colored figure of this hawk in Meyer and Wiggleswoorth's Birds of the Celebes.

On my second visit to Palmas, none were seen, although the whole island was ransacked in search of them.

At 1500 feet altitude, on Balut Island, Sarangani group, January 23, 1906, I shot at a dark-colored hawk, heavily cross-barred below, size of the American Broadwing.

(Sheet XVI.)

Haliastur intermedius Gurney.

Camp Overton, northern Mindanao, May 7, 1906.

(Sheet IV.)

(-) Spilornis holospilus (Vigors).

Dee-Koop'; Filipinos of Samboanga, fide Estrellas.

At Aulug, on the east shore of the Gulf of Davao, June 12, 1904, I shot one of a pair: No. 13492, ♀ad. Iris, mastax, and tomia, chrome yellow. Bill plumbeous, black at tip. Feet yellow; claws black. Measurements: 540; 1135; 360; 255; culmen and cere together, 35; culmen (chord), 25; tarsus, 80; middle toe with its claw, 55.

On Talicud Island, Gulf of Davao, July 17, 1904, this hawk continually flew above the treetops uttering an exaggeration of the cry of our Ceuthopus vireus.

(Sheet I.)

Larus vegae Palmén

October 9, 1906, a black gull with sooty under parts and a white line over the eye, size of *Larus argentatus*, floated past on a bit of wood. I shot at it, and noted, as it flew that its wings were narrow.

(Sheet XV.)

Haliaeetus intermedius Gurney.

Lawan, Tagals of Luzon.

Marauquina River, San Mateo, and Marble Canyon, Rizal Province, Luzon, September 17, 1906.

Manila, Pasig, Taytay, and Cainta, ~~Rizal~~, Luzon, Sept. 21, 1906.

At Camp Dagg, Pangasinan Province, Luzon.

Lieutenant Charles M. Maigne, 7th Cavalry, U. S. Army, noted, August 16, 1905: "Also, to-day a warm of locusts came in, and following them were seven or eight big birds with white heads, of the hawk or eagle family."

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Davao, southern Mindanao, June 13, 1904.

Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.

Tagulaya to Loonoahling, Mt. Apo, southern Mindanao, June 15, 1904.

Davao, southern Mindanao, July 18 and 19, 1904.

Cotabato, southern Mindanao, July 23, 1904.

Camp Overton, northern Mindanao, July 9, 1906.

Abundant over the harbor at Cebu, Cebu Island, July 10, 1906.

Camp Connell (Calbayog), western Samar, July 12, 1906.

Numbers lined Manila Harbor, July 15 to 18, 1906.

Many about the shipping in Mariveles Harbor, Luzon, July 19, 1906.

Off Iloilo, Panay Island, July 23, 1906.

Tacloban, Leyte Island, July 24, 1906.

(Sheet III.)

Totanus eurhinus Oberholser.

Macclan Island, off east coast of Cebu Island, September 3, 1906.
One shot on Cuyo Island, Sulu Sea, September 10, 1906.

Totanus

April 22 and 23, 1904 — In flocks, pairs, and singly. Legs and feet greenish olive. Size of Willet. One shot by Capt. McCoy or Lieut. Lueckenbush. Not skinned. (April 22 and 23, 1904.) Tubay River, n. Mindanao.

A Totanus was seen in great numbers on the shoras and coral reefs surrounding three small wooded islets off the south end of Tibutu Island, January 5, 1906. See specimen [illegible]

The same species as above was seen on Loran Island (off Ubian Island), October 12, 1906; one.

One shot on Cuyo Island, Sulu Sea, September 10, 1906.

(Sheet VIII.)

Actitis hypoleucos (Linnæus).

Zamboanga, Mindanao, ~~December~~ January 11 and 12, 1906

Maimbún and Diet Lake Beach, Sulu Island, March 1 and 2, 1906.

, (Dorey's Camp 4,) west coast of Basilan Island, Jan. 30, 31, 1906

March 3, 1906.

Malabang, southern Mindanao, March 15, 1906.

Pangsang, Dumanquilas Bay, southern Mindanao, August 17, 1906.

Cebo Island, Sogat Bay, off S. Mindanao, April 2, 1906

San Ramon and Cipala, west Mindanao, August 27, 1906.

Maitan Island, off the east coast of Cebu Island, September 3, 1906.

Camp Connell, west coast of Samar Island, September 5, 1906.

common, islet, on Cuyo Island, Sulu Sea, September 10, 1906.

Puerto Princesa, east coast of Paluan Island, September 11, 1906.

common on shores and islets of Malampaya Sound, ~~off the east~~ west coast of Paluan Island, September 12, 1906.

Culion, Calamian Island, September 13, 1906.

Abundant on all waters between Manila and city reservoir at ft. Marble Mountain, Luzon Island, September 17, 1906.

Sinytay and Cuilipoto, Rizal Province, Luzon, September 21, 1906.

One on Taliend Island, Gulf of Davao, Mindanao, July 17, 1904.

(Sheet I.)

Calidris alba (Pallas).

Specimen No. 14423, ♀ad., (shot by General Wood), was found among the waders brought aboard the ship by General Wood's party, from Tumindao Island (off Sitankai Id.), S. Philippines, October 13, 1906. This skin is like one from the Malabon River, Luzon Island.

(Sheet I.)

Tringa crassirostris T. and S.

Among the shore birds brought ~~aboard~~ the ship from Tumindao Island, off Sitankai Island, October 13, 1906, was specimen No. 14422, ♂ad., shot by General Wood.

At the Bureau of Science, Manila, I noted: "No. 14442 is, apparently, Tringa crassirostris."
Left in the Bureau of Science: No. 14422.

(Sheet 1.)

Heterophyga acuminata (Vieillot).
Tringa acuminata Vieillot,

A few were seen on the beach at Santo Domingo de Basco, Batan Island, P. I., May 27, 1907, ~~1906~~, when my Ilocano boy, Ceriaco, shot one, but laid it on a bank where a native got it during his absence.

Dagupan.

In the Museum of Santo Tomas College, Manila, I saw a specimen labelled "Manila." This is the bird I saw, shot by Lieut. at Dagupan, Pangasanan Province, Luzon,

? (Phalaropus hyperboreus (Linnaeus).

Note.—Doubtless the same species that I afterwards collected in Basilan Strait, off Zamboanga, Mindanao. See specimens for determination.

Noted in enormous flocks off the mouth of the Agusan River, northern Mindanao, April 22, 1904.

On the Tubay River, northern Mindanao, April 22 and 23, 1904, noted in flocks of all sizes, probably up to 500. Single birds swam within a few yards of our boats, on April 23, during the hurricane.

In the Celebes Sea, off southern Mindanao, between the Sarangani Islands and Zamboanga, January 24, 1906, many good-sized flocks of Phalaropes were floating on the smooth sea or making short flights.

On the east arm of the Sulu Sea, between Mindanao & Cebu islands, September 2, 1906, I noted saw flocks of phalaropes floating on the water.

(Sheet 1.)

Antigone sharpei Blanf

This species has been seen by Mr. F. D. Burdett, at Agraga, about 5 miles from Nagpartian, in Ilocos Norte Province, Luzon. It is well known to the natives. Cang-Cang is the Ilocano name.

First-Lieutenant Karlin L. Whitson, 9th Infantry, informed me that he had found this bird near the pueblo of Lopez, 32 miles East of Tayabas and 25 miles west of Guinayangan, Luzon Island.

(Sheet 1.)

Ardea sumatrana Raffles

Many of these huge herons were seen on the sandy shoals of three small coral islands, off the south end of Sibutu Island, January 5, 1906. At low tide they wandered for miles over the coral reefs surrounding these islands.

Many of these imposing herons were seen wading over the coral reefs surrounding Sitankai Island, October 13, 1906.

On Sumindao Island (off Sitankai Island) this huge heron was abundant, October 13, 1906, when General Wood procured the specimen preserved (No. 14425, Sad.) with a small-calibre rifle.

Bangao to Balambing (Tawi Tawi Island) Jan. 6, 1906, many seen.

Common at Sibutu Town, S. west coast of Sibutu Island, January 7, 1906, when General Wood shot the fine male specimen preserved in the collection, at long range, with a small-calibre rifle.

Several seen on Simalu Island, off Tawi Tawi Island, January 8, 1906.

One was shot on Malampaya Sound by General Leonard Wood, September 12, 1906.

Butorides javanica (Horsfield).

Noted at Camp Overton, near Iligan, Mindanao, July 9, 1906.

(Sheet I.)

Butorides spodiogaster (Sharpe).

Butorides spodiogaster Mearns, Philippine Journ. Sci., II, October, 1907, p. 353 ("On a mangrove islet in Malampaya Sound off the Island of Palawan, I shot an adult female of this heron, September 12, 1906. This specimen is No. 14319 of the author's collection.").

Islet of Malampaya Sound off the ~~east~~ west coast of Palawan Island, September 12, 1906.

(Sheet I.)

Butorides amurensis Schrenck.

Abundant, March 25, 1907, on Lake Naujan and on the Naujan River, Mindoro, where Butorides javanica was even more abundant. The two species could readily be contradistinguished, in flight, by the much larger size of Butorides amurensis.

Several seen, one shot, on the Benibi River, Mindoro, Nov. 3 and 4, 1906.

Abundant on the Alag River, Mindoro, Nov. 5–8, 1906. Sometimes shy, sometimes stupidly tame. Sits on rocks in the stream and on the shores, catching tadpoles and fish. Flies into the forest and hides when frightened. Note like the alarm cry of the Mindoro monkey, resembling the note of our Butorides virescens.

(A specimen was collected on a nameless islet of Malampaya Sound, off ~~east~~ west Palawan, September 12, 1906.

(Sheet 1.)

Nannocnus eurythmus (Swinhoe).

A soldier brought me an adult female of this species which he had shot very badly with the service rifle. It was killed a few miles east of Zamboanga, Mindanao, 190 .
A number of Xenophaps polycephala were also brought in at the same time, so I did not find time to skin the very bad specimen of Nannocnus eurythmus which was the only one I saw.

(Sheet 1.)

Dendrocygna guttulata Wallace.

Siet Lake, Sulu Island, contained a great many ducks, some of which may have been of this species, as I found a flock of 4 asleep on logs in a shallow lagoon in the forest adjoining Siet Lake Beach, March 2, 1906, and shot 3, 2 of which were preserved (No. 13991 ♂ad. and 13992, ♀ad.).

Three were shot on a marsh on the west side of Basilan Island, March 3, 1906, when a specimen No. 13993, ♂ad., was preserved.

No. 14002, ♀ad., was taken at Zamboanga, Mindanao, March 17, 1906. near site of Dorsey's out-post, [illegible]

A duck which was entered in my notes as probably a redhead or pochard was quite numerous on Paoay Lake, Ilocos Norte Province, Luzon, January 27 and February 5, 1907: "Ducks with red heads and canvas backs were seen in numbers; one shot, not recovered."

(Sheet I.)

Mareca penelope (Linnaeus)

Widgeon

There were many Widgeon on Paoay Lake, Ilocos Norte Province, Luzon, January 27, 1907, when I shot a female.

Several small flocks were also noted on Paoay Lake, February 5, 1907.

(Sheet I.)

Sefila acuta (Linnæus).

On February 5, 1907, three were seen flying together, on Paoay Lake, Ilocos Norte Province, Luzon.

(Sheet I.)

Spatula clypeata (Linnæus).

Flocks of Shovellers were seen on Paoay Lake, Ilocos Norte Province, Luzon, January 27, 1902.

Surgeon

Flocks do February 5, [illegible]

(Sheet I.)

Fuligula fuligula (Linnæus).

Hundreds of these ducks were seen on Paoay Lake, Ilocos Norte Province, Luzon, January 27, 1907, when 7 were shot by Captain Hahlbrun and myself. We were surprised by the tameness of this species.

There were many good-sized flocks on Paoay Lake, February 5, 1907.

Ploceus melanogaster (Pennant).

One in a tree at the mouth of the Rio Grande, southern Mindanao, March 15, 1906.

Mouth of Matalung River, near Malabang, southern Mindanao, March 15, 1906; two seen.

(Sheet I.)

Phalacrocorax carbo (Linnaeus).

Birds supposed to be this species were noted on the ~~Sul~~ Celebes Sea, off south Mindanao, October 9, 1906. They were floating on logs at some distance from the ship.

(Sheet I.)

Astur trivirgatus (Temminck).

I saw one at Manila, Luzon, March 24, 1907.

I shot one of two seen on Corregidor Island, off Manila Bay, December 16, 1906.

"Astur trivirgatus was the Hawk I shot on Corregidor Island, December 16, 1906." (note based on comparison with mounted specimen in the Museum of Santo Tomas College, Manila.)

Commander Frederick W. Coffin,

Birds seen in the aviary of ~~Captain~~ Coffin, U.S. Navy, at Pollok Naval Station, Mindanao, P.I.

(March 2, 1904.)

12 Dendrocygna (arcuata?) "Pato del Monte."

1 Buburlcus coronatus with saffron plumes.

8 Porphyrio pulverulentus

1 Cacatua haematuropygia

1 Tanygnathus lucorensis

14 Loriculus galgulus

1 Butorides javanica

1 Pycnonotus goiavier

These birds were all brought in by Moro natives from the immediate vicinity of Pollok, Mindanao.

[illegible], April 20, 1904.
[illegible]. ♂ad. Megalurus palustris.

Bacuag near Surigao, N. Mindanao, P.I. April 21, 1904 ♂ad.

13343, Tahm-se. Red-breasted Sunbird ♂ad

13344. do ♂ad.

13345. Ring-necked Dove. ♀ad.

13346. Brown-breasted Thrush. — ad.
Dinagat Island, 20 m. N. of Surigao. April 21, 1904.

13347. Rameron ♂ad.

13348. Red-breasted Barbet ♂ad.

13349. Black-throated Sunbird ♂ad.
~~13~~ Surigao. April 21, 1904.

13350. Lark ♀ad.

13351. Curlew ♂ad.
Tubay, Mindanao, P.I. April 22, 1904

13352. Largest Honey Creeper. ♀ad.
Jabongan, Lake Sapongan, N. Mindanao, P.I. Apr. 24, 1904.

13353 Red-breasted Sunbird ♂ad.

13354. Black-throated " ♀ ~~juv.~~

13355 Anthus ♂ad.
On Tubay River between Lake Sapongan and the town of Santiago, April 24, 1904.

13356. Hypothymis. Blue Fly-catcher. ♂ad. Bill and feet blue like back.

13357. Naked-headed Starling. ♀ad. Avipositing.
Tubay River, below Santiago, Mind., P.I. Apr. 24.

13358. Blue-and-chestnut Kingfisher. ♀ad.

13359. do " ♀ad.

13360 White-headed " ♂ad
Santiago Tubay River, Mind. P.I.
April 24, 1904.

13361. Raquet-tailed Parrot.
In captivity.
Surigao, Mindanao, P.I. April 25

13362. Hypothymis

13363. Little Psaltriparus-like reddish-headed bird. Orthotomus

13364. Red-bellied Barbet
Dicaeum pygmaeum.

(over)

19365 Blue-winged Parraquet.

19366. Little red-and-green Parraquet. ♀ad.

~~19367. Great White Egret~~ Gandia,

19367. Butorides ♂ad., Upper Agusan River, Mind., P. I. May 6, 1904. Shot by Col. Harbord.

19368. Ramorow ♀ad. Gativa, Upper Agusan R. ~~April 7.~~ May 6, 1904.

19369 Blue-and-chestnut Kingfisher ♀ad. Patrocino, Upper Agusan R., Mind., P. I. May 7, 1904. Ovipositing.

19370 Great White Heron. ♀ad. Shot by Mc Coy. Iris pale yellow, almost white. Bill yellow. Legs and feet purplish black. May 8, 1904. Varicela, Upper Agusan River, Mindanao, P. I.

19371. Little black-and-white Kingfisher. ♂ad. Shot by Capt. Mc Coy, on the Agusan River, a short distance below Lake Dagum, Mindanao, P. I. May 9, 1904. Iris very dark brown. Bill black. Sole, 2-1=3. Feet vermillion; claws brownish black.

Mammals.

Zamboanga to Manila and returning. July 8 to 27, 1906:-

~~Jorbing~~ July 13, 1908. — In Batangas Bay off Luzon Island were seen a few very large Dolphins.

Fish.

In an arm of the Sulu Sea off Iligan Bay, N. Mindanao, July 7, 1906, I saw a large shark; dorsal fin far above water; as the ship passed near, its fluke also appeared above the surface; color brown.

In Batangas Bay off southern Luzon, July 13, 1906, one large shark was noted.

Off Jimanez, northern Mindanao, in an arm of the Sulu Sea, May 7, 1906, I saw a large shark that swam a long distance with its dorsal fin projected high above the water, but it soon fell astern.

May 8, 1906.- Left Camp Overton for Misamis, Mindanao on a steam launch. Flying fishes very stout and large.

(A List of the birds of Siassi Island, P. I. furnished to Captain T. L. Smith, 17th Infantry, U.S. Army.

1. Crow. Corone philippina Bonaparte.
2. White Parrot. Cacatua haematuropygia (P. L. S. Müller).
3. Green " . Tanygnathus
4. Paraleet. Loriculus bonapartei & Souance.
5. Turtle-dove. Turtur dussumieri (Temminck).
6. "Wild Pigeon that is brown tinged with green."
7. White " , etc. Myristicivora bicolor (Scopoli).
8. Snipe. Gallinago
9. "Bangau" } Moro names of "two birds that live
10. "Sambal" } in the grass."
11. Small Brown Heron. Ardetta
12. Large White " Bubulcus or Herodias.
13. Chicken Hawk. ? Haliastur intermedius Gurney.
14. "Eagle (three kinds, the largest being known by the name of macnaol)" { Haliaëtus leucogaster (Gmelin). Haliastur intermedius Gurney. Spizaëtus?
15. Sea Gull = Sterna bergii.

Total 17 species

A List of the Birds of Siassi:—

Given by Worcester and Bourns in 1898:—

7. Pandion varnus (Linnaeus).

32. Turtur dussumieri (Temminck).

242. Centropus viridis (Scopoli)

294. Calornis panayensis (Scopoli).

365. Dicaeum hypoleucum Sharpe.

497. Rhipidura nigritorquis Vigors.

Detected by Captain T. L. Smith, 17th Infantry, U.S. Army.

Birds collected on Cagayan Sulu Island, P.I.

Amaurornis 13364, 13391.

Munia jagori 13366, 13375, 13388,

Calornis panayensis 13365

Budytes yellow 13367

Motacilla ~~Budytes~~ gray 13390

Solitary Tattler 13368

Tanygnathus lucionensis 13369

Anthrothreptes ~~chlorogaster~~ cagayanensis 13370, 13376

Ixeniegretta sacra 13372, 13397

~~Loriculus galgulus (Linnæus)~~

Small red-and-green Lagoon 13371, 13383, 13384.

Irrigordes hypoleucus 13372, 13373.

Collocalia ~~fuciphaga~~ inexpectata

Pale-rumped Swift 13377, 13378, 13379, 13380.

Circus aeruginosus 13382.

~~Ichiba~~ Dicrur suluensis 13385

Butastur indica 13386

Carpophaga pickeringi 13387

Loriculus galgulus (Linn.) 13393

Hirundo javanica 13389

(Entered on card sheets under species.)

18 species and 29 specimens

Time: February 25 and 26, 1904.

Birds known from the island of Cagayan Sulu, P. I., before our visit: —

1. Carpophaga pickeringi Cassin ✓
2. Arenaria interpres (Linnaeus).
3. Tringoides hypoleucus (Linnaeus). ✓
4. Demiegretta sacra (Gmelin). ✓
5. Butastur indicus (Gmelin). ✓
6. Eurystomus orientalis (Linnaeus). ✓
7. Halcyon chloris (Boddaert). ✓
8. Tanygnathus lucoensis (Linnaeus). ✓
9. Calornis panayensis (Scopoli). ✓
10. Anthothreptes malacensis (Scopoli).
11. Chibia bornensis Sharpe. ✓
12. Orthotomus cinerascens Blyth.
13. Mixornis cagayanensis Guillemard. ✓
14. Lalage terat (Boddaert). ✓
15. Hirundo javanica Sparrman ✓

Indian

Wheeled

Five Moro tribes:

1 Sulu 4 Magindanaw
2 Samal 5 Malanaw.
3 Yakan

Their languages are named the same.

1. The Sulus inhabit the island of Sulu, and the larger islands of the Sulu Archipelago.
2. The Samals have settled throughout the whole Sulu Archipelago and along the coasts of Basilan and the peninsula of Zamboanga.
3. The Yakans inhabit the interior and coasts of Basilan and a few small adjacent islands.
4. The Magindanaws inhabit Cotabato and the whole Rio Grande Valley, and the southern coast of the Island of Mindanao from the Bay of Sibulgay to Sarangani Point.
5. The Malanaws inhabit the Lanao District, principally the region surrounding Lake Lanao.

The Sulus ruled the entire Sulu Archipelago and Basilan and held both Samals and Yakans under com=
=plete control for more than four centuries. For this reason, the Samals and Yakans understand and write Sulu. Hence the Sulus, Samals, and Yakans understand one language — Sulu.

The Magindanaws and Malanaws are so closely related that adults of either tribe can write both dialects and understand each other without much difficulty. In this way, two lan=
=guages — Sulu and Magindanaw — serve perfectly well for all five Moro tribes.

Mr. N. M. Saleeby, Superintendent of Schools, has prepared for use in the public schools of the Moro Province, two readers, one in Sulu and the other in Magindanaw, for the use of the children of the five Moro tribes.

Moro names furnished by a Zamboanga Moro named Jim Bake Bake.

5634 Basilan Squirrel = Bah'-bo (Basilan Moro).
House Rat = Ahm-bough'.

13129. Crake = Su-roo-car'-ree.

Bird's nest like Eupidomax =
Nest = el nido (Spanish) = Man-oak'-man-oak. Any-in-tow'-lo
This bird's name in Moro is Poo-gar'-rin.

13221. Starling, Blk = Man-da'-shong
13245. Rifle Bird = Tag'-tose.
13287. Short-tailed Hirundo = Man-oak'-man-oak Val-lé-o.
Long " " = Tom-pé'-lik-pé'-lik.
13170 Small dark Swift = Pee'-lick-pee-lick.
13190 White-headed Chat = 'Sow'-pit.
13276. Glossy Sunbird (Cagayan) = Tal-lé'-gus-lé'-gus.
13244 Hairy-back = Po'-pee Tal'-oon.
13176. Blk-th. Sunbird = Es-ta'-gua-lu-gus-lé'-gus.
13197. Common Bee-Eater = Tom-pee'-lik-pee'-lik.
13164 Rock Thrush = Anok-tok'-tor
13185. Ruig-neck = Ca-bong'-i-bong-i Ta'-na.
13163. Yellow-eyelid Chat = Man-oak-man-oak Ba'-si-lan.
1320. Fairy Bluebird = " " " " Be'-lu.
13167 Brown-breasted Thrush = Beag-pee-tow.
13234. Ruiplover = Man-oak-man-oak Sa-ba'-la.
13299. Black (Barbet ??): ah-seen
13193 Dusky " = " " Meh'-hy (= big ah-seen).
13198 Forest Ramerow (Basilan) = Ku-how'.
All black " = Ku-how Et'-ome.
13128 } 13318 Sea Eagle = Sahm-bu-la'n'.
13154. Bumbodgen Ramerow = Ku-how' De'-ky.

Green Parrot (13269). { Basilan Moro = Cong'-og.
{ Zamboanga " Ah-gop.

Little green and red Parroquet = Cole-le-le-se (all Moros) 13224.
Cockatoo (13237) = Bo'-ki (Moro). " " " "
Spoon-tailed Parrot = Kale-let (Moro). 13238.
13214 White-headed Hawk = Bell'-ch.
13202 Marsh Harrier = ~~Jog'-dul~~ Jog'-tul (Moro).
13257. Kite = Kong'-ch.
13247. Alcco = Sa-bo-guk'.
13297 Orange-breasted Green Pigeon = Jooch'-mo
13212 Red-breasted " " " " tah'-lon.
13258 Big gray Pigeon = Kahm-ass'-su Bowd.
13261 White " = Bowd.
13252 Carpophaga aenens = Bowd.
13262. Bronze Pigeon = Doon-doo'-nay.
13199. Big Woodpecker = Sahm-boo-la'-tu (Basilan Moro).
13165. Red " =
13315 White-browed Door = Mahn-ah'-tad.
13158. Brown Shrike = Ken'-das.
13302. Long-tailed " = Kah-bong-iy-bong'-ey.
13169. Black & White " } Kuhl'-lu-l
13159 " " }
13211 Frogmouth = Jah-loag-sack'-ki.
13314. Blue & White Kingfisher = Joo'-sick.
13210. Oriole } = Jin-tee-hee'-lo.
13181. Swallow-Shrike } = Tee-glah'-pass.
13141. White-headed Kingfisher = Bah-ga'-ka.
13323. Painted Snipe = Pim'-ping-ega'-rong.
13130. Orange-legged Tattler = Pim'-ping.
13268 Solitary " = Joo'-hik.
13271. Irrigoides = Pim-ping Dick-ey-dick'-ey.
13309. Brown Heron = Sah-ling-gno-gwack'
13139. Sandpiper = Pim'-ping Joo'-hick
13145. Ringplover = " " Sol'-long.
13266. Brown Java Sparrow = May'-yah.
13135 Gray " " = May'-yah-Jal'-oon
13239. Butorides — — — = Doo'-oong.
13246. Little Gray Heron = Beg'-go.
13207. Sterna bergii = Jah-la-ta'-la.
13264. White-breasted Rail = Gar-su'-la.

✓ Little gray Rail. Kah'-ke-ca-su'-la.
✓ Brown-winged Quail. Tuh'-ha-low'-e.
✓ White-winged Jacana. ~~Ahn~~ Ahn'-ok Lin-ge'-~~sahn~~ sahn
✓ Black- " " Bah-ku'-ku-low-ey.
✓ Red and Green Barbet. Nahr'-nung. ("Nin" says he has seen this bird in Basilan Id.)
✓ Horned Gray Crake. Kahr'-rong.
✓ Blue Rock Thrush (female from Camiguin). Too'-ey.
✓ Little Brown Heron. Mah'-nas.
✓ Carabao-Bird (Heron). In-la'-boong.
✓ Narrow-tailed Jacksnipe. ~~Mah'-nas~~. Ku-ra Ku-ra.
✓ Mirafra Lark. Day'-on-par'-ong.
✓ Budytes . Tahng-koo-at Koo-at.
✓ Carabao. Tahn'-dook.

Knife: Tah-goo'-bon. Handle partly of Carabao horn. From Basilan Moros (Sahn'-ma-ha'-kan). 5 pesos.

(Sheet I.)

Birds of Palmas Island, P. I.

On January 21, 1906, the following:

"The natives stated positively that there were no small indigenous birds." (Mearns, notes)

"No little birds and no kingfishers were known to inhabit the island." (Mearns, notes)

"No shore birds except a 'brown rail' seen in a marshy jungle by Major David S. Stanley, Quartermasters Department, U.S. Army." (Mearns, no.)

Species seen.—

(1) 2 Hawks, species not determined. Can be identified from colored plate in Meyer and Wigglesworth's Birds of the Celebes.

(2) Eudynamis mindanensis.

"Whenever the guns were fired the Koels would scream. I collected a female." No. 13887. Stomach filled with green fruit, only. Iris red. Testicles functionally enlarged. Note the same as the [illegible]

(3) Muscadivores longhornei

Sixty (60) were brought aboard the ship. Four skins were preserved. Specimens:—

13888 ♂ ad.

13889 ♂ ad. 430; 750; 240; 160; 20; 34; 49.

13890 ♀ ad. 420; 735; 240; 156; 20; 32; 46.

13891 ♀ ad

~~13892~~ } not skinned.
~~13893~~ }

Bill pale bluish gray at tip, darker plumbeous at base. Iris red. Eyelid and feet vinaceous. Bare space surrounding eye pale plumbeous. Claws dusky purplish gray.

January 21, [illegible]

(Sheet II.)

Birds of Palmas Island, P. I.

On October 7, 1906, the following:—

"Landed at Palmas Island at 8 A.M., and returned to the ship ("Mindanao") at noon, for luncheon.

General Wood shot:—

1 Otomela lucionensis

2 Halcyon chloris

1 Eudynamis mindanensis

Dr. Paul C. Freer shot:—

1 Eudynamis mindanensis

3 Muscadivores langhornei

Captain James K. Thompson shot:—

2 Eudynamis mindanensis

2 Muscadivores langhornei

Dr. Mearns shot:—

1 Otomela lucionensis

1 Collocalia whiteheadi

1 Acanthopneuste borealis

1 Hemichelidon griseisticta

2 Halcyon chloris

2 Hirundo rustica gutturalis

During the forenoon, the following additional birds were seen:

Bubulcus coromandus.—Flock of about 12.

Petrophila manilla.—One.

Falco peregrinus.—One or two.

Demiegretta sacra.—One.

(continued on Sheet III.)

(Sheet III.)

Birds of Palmas Island, P.I.

Numenius variegatus. — Three.

General Wood saw a large flock of shore birds. Went ashore, for two hours, in the afternoon, and saw the following birds: —

Fregata _____. — Two, together, soaring over the native village.

Hirundo rustica gutturalis. — Hundreds flitting about.

Budytes flavus leucostriatus. — Just as we were embarking a flock of about 30 passed over from the North.

Falco peregrinus. — One.

Specimens collected on Palmas Island, October 7, 1906: —

14385.	Eudynamis mindanensis	♂ ad.	Captain Thompson	
14386.	" "	♂ im	do	
14387.	" "	♀	Dr. Paul C. Freer	
14388.	" "	♀	General Wood.	
14389.	Otomela luciensis	♀	do	
14390.	" "	♀	Edgar A. Mearns	
14391.	Hemichelidon griseisticta	♀ ad.	do	
14392.	Hirundo rustica gutturalis.	♂ ad.	do	
14393.	" " "	♂	do	
14394.	Collocalia whiteheadi	♂ ad.	do	
14395.	Acanthopneuste borealis	♀ ad.	do	
14396.	Muscadivores geanhornei pickeringi	♂ ad.	Dr. Paul C. Freer	Coloration dark.
14397.	Halcyon chloris	♀ ad.	General Wood.	

List of the Birds found on Palmas Island.

~~Fregata~~

Muscadivores

[illegible] (not identified).

Large flock of shore birds seen by General Wood (species not identified).

Numenius variegatus

Demiegretta sacra

Bubulcus coromandus

Fregata sp.

Falco peregrinus

Halcyon chloris

Collocalia [illegible]

Eudynamis mindanensis

Hirundo rustica gutturalis

Hemichelidon griseisticta

Acanthopneuste borealis

Otomela lucionensis

Budytes flavus leucostriatus

Petrophila manilla

Birds of Sarangani Island, P.I.

At 9:30 A.M., January 23, 1906, landed at the Belanes' village of Tumanao, in a beautiful harbor of Sarangani Island, off southern Mindanao.

Birds seen: 1. Dicaeum japonense
2. Cacatua haematuropygia
3. Tanygnathus lucionensis
4. Tanygnathus _____
5. Limnopis jugularis
6. Numenius variegatus (one shot).
7. Rhipidura nigritorquis
8. Halcyon chloris
9. Haliastur intermedius
10. Pandion haliaëtus
11. Corone philippina
12. Hirundo javanica
13. Turtur dussumieri
14. Demiegretta sacra
15. Charadrius fulvus

At daybreak, October 8, 1906, we visited Paliucu and Tumanao, on Sarangani Island, P.I. The birds seen on that Island were as follows:—

1. Numenius variegatus
2. Actitis hypoleucos
3. Pontoaetus leucogaster
4. Haliastur intermedius
5. Eudynamis mindanensis
6. Corone philippina
7. Oriolus chinensis

(Sheet II.)

Birds of Balut Island, Sarangani group.

Birds noted October 8, 1906:—

1. Phapitreron brevirostris
2. Muscadivores aenea
3. Actithodromus (see specimen no. 14344)
4. Numenius variegatus
5. Actitis hypoleucos
6. Pontoiaetus leucogaster
7. Tanygnathus lucionensis
8. Tanygnathus
9. Loriculus (apicalis?).
10. Eurystomus orientalis
11. Pelargopsis gigantea
12. Halcyon chloris
13. Eudynamis mindanensis
14. Centropus viridis
15. Hirundo rustica gutturalis
16. Pole philippensis
17. Pycnonotus goiavier
18. Mucronous mindanensis
19. Motacilla boarula melanope
20. Corone philippina
21. Orthotomus

Birds of Balut Island (Sarangani group). (Sheet I.)

Birds noted January 23, 1906:—

1. Sterna bergii boreotis
2. Numenius variegatus
3. Gallus gallus
4. Muscadivores aenea
5. Myristicivora bicolor
6. Pontoaetus leucogaster
7. Haliastur intermedius
8. Hawk size of Broadwing, [illegible]
9. Prioniturus (discurus?)
10. Tanygnathus luconensis
11. Tanygnathus
12. Loriculus (apicalis?)
13. Eurystomus orientalis
14. Pelargopsis gigantea
15. Halcyon chloris
16. Hemichelidon griseisticta
17. Eudynamis mindanensis
18. Petrophila manilla
19. Penthornis
20. Orthotomus
21. Cinnyris jugularis
22. Cinnyris sperata
23. Leorone philippina
24. Sarcops calvus melanonotus

[illegible]

Bird data for Dr. Richmond.

A copy of the following was furnished Dr. Richmond:—

The following were skins that I had left out for further study in the Bureau of Science. These will be sent to the U. S. National Museum by Mr. McGregor when he sends those which he borrowed for his own studies.

✓ Tringa crassirostris.—No. 14422. Lumindao Id., P. I.
✓ Totile sinensis.—14712, 14711, 14779; 14710, 14693, and 14732.
✓ Prionturus montanus.—No. 14351. Benguet Prov., Luzon.
✓ Columba griseigularis.—No number. ♀ From Batan Id.
✓ Cacatua haematuropygia.—14336, and 14560 (♂ & ♀)
✓ Agialitis dubia.—14707, 14845, and 14688.
✓ Agialitis alexandrinus (perhaps peronii).—14869, and [illegible]
✓ Orthotomus chloronotus.—15009, 14981, 14905, 14986, & 14977.
✓ Dicaeum pygmaeum.—14943, 14948, 14931, and 14714.
✓ Abrornis olivacea.—14185, 14113, and 14210.
✓ Acanthopneuste borealis.—14623, 14666, 14600, 14395, and 14557.
✓ Emberiza sulfurata.—14754, 14823, 14777, 14890, 14721, 14831, 14830, 14733, 14719, 14778, 14720, 14734, 14755, and [illegible]
✓ Caprimulgus griseatus.—14707.
✓ Scops, new species.—~~[illegible]~~ 14421 ♂ ad. Lumindao Id. S. [illegible]
✓ Acrocephalus orientalis.—15035.
✓ Horornis minuta.—14810, 14867, and (no tag) shot by Carraro, at [illegible]
✓ Horornis canturiens.—14883, 14758, 14835, 14718, and 15[illegible]
✓ Turnix occellata.—14990, 14796, and 14795.

Total 61 skins. (Save for my file.) E. A. M.

[illegible] that whistles when [illegible]

Mammals.

Horace W. Bivins, Ordnance Sergeant, U.S.A., wrote me from Camp Overton, northern Mindanao, July 3, 1907: "I also have a white monkey (live)," from Camp Overton (*Cynomolgus mindanensis* Mearns).

Major John R. White, Philippine Constabulary, Supt. of Prison Colony at Iwahig, near Puerto Princesa, Palawan sent: Flying Squirrel, Otter, Civet Cat, and Skunk skins.

(Sheet .)

Corone philippina Bonaparte

Pang pang, on Dumanquilas Bay, southern Mindanao, August 17, 1906

Cabo Island, Igat Bay, off south Mindanao, April 2, 1906.

Malina Island, Dumanquilas Bay, off S. Mindanao, April 2, 1906.

Agala, western Mindanao, August 27, 1906.

Cebu, Cebu Island, September 3, 1906.

Mactan Island, off Cebu, September 3, 1906.

Campelcunell, west coast of Samar Island, September 5, 1906.

Quite numerous on Langa Island, Dalupa, September 10, 1906, when a pair had a nest as yet without eggs: parent shot lodged in bamboo.

Marigina Valley, Rizal Province, Luzon, September 17, 1906.

~~Cat~~ Antipolo, Rizal Province, Luzon, September 21, 1906.

Sulug, east shore of Davao Gulf, southern Mindanao, June 12, 1904.

Davao, southern Mindanao, June 13, and July 18 to 20, 1904.

Tagulaya, west shore of Davao Gulf, southern Mindanao, June 14, 1904.

Tagulaya up to ~~1030~~ 2000 feet altitude on trail up Mt. Apo, Mindanao, June 15, 1904.

Todaya, 4000 feet altitude, Mt. Apo, Mindanao, June 17, 1904.

In descending Mt. Apo, July 10, 1904, it was first met with at the altitude of 4225 feet.

Talicud Island, Gulf of Davao, off southern Mindanao, July 17, 1904.

At Todaya, 4000 feet altitude, on Mount Apo, specimen No. 13691 was collected with nest and two eggs, July 11, 1904.

Unidentified Birds.

Many flocks of plotanopes and of small waders were seen on the east arm of the Dulu Sea, between Mindanao and Cebu islands, September 7, 1906.

On our silently Malay paper-sound, in Palawan Island, Major E. B. Babbitt saw "a yellow bird the size of our Eastern Bluebird," on September 12, 1906.

Early in August, 1905, Lieutenant Charles M. Maigne, 7th Cavalry, U. S. Army, saw at Camp Gregg, Pangasinan Province, Luzon: "at a distance a beautiful rose-hinted bird, with about two or three feet spread of wing."

At Davao, southern Mindanao, June 13, 1904, I noted the following:

Took a walk at 10 A.M. Chip-ker-ree'-oh was the ditty of one unidentified bird, in a voice resembling that of Pipilo erythophthalmus. (Another unrecognized bird note, coming from a swamp covered by the nipa palm, was a single, long-drawn whistle, frequently repeated.

Nos. 13658-59 (pair), called Sal-yo-see'-bon by the Bagobos, had the conjunctiva a brilliant blue. See catalogue, and add this datum.

(At Camp Goodfellow, 6000 feet on Mount Apo, the night bird that whistles who-who' is called Poo'-lō by Bagobos.

51. *Cinnyris sperata* =

Range. — Noted at 2000 feet on Mount Apo.

Specimens. — 13712, 13507 (1750 feet), 13713.

52. *Oriolus chinensis* = Sah-lee'-oh.

Range. — 2000 to 4000 feet.

Specimens. — 13695 (4000 feet), 13700, and 13701.

53. *Corone philippina* = Huac or Hoo-huac'.

Range. — 2000 to 4000 feet.

Specimen. — 13691, Todaya, 4000 feet.

54. *Goodfellowia miranda* = Too-cah-ling'.

Range. — ~~6000~~ 4000 to 7000 feet.

Specimens. — 13555, 13556, 13558, 13559, 13569, 13570, 13571, 13594, 13635, 13636, 13637, 13638, 13669, 13670, 13723 (Todaya, 4000 feet), 13530, 13557, 13560, 13596, 13567, and 13619. (4000 to 6750 feet).

55. *Lamprocorax todayensis* = Kohl-lee'-po.

Range. — Common at Todaya, 4000 feet; not seen elsewhere.

56. *Munia jagori* = My-uh-del-ooh-mah'-tee or My-ah-del-mah'-t

Range. — 2000 to 4000 feet (breeding at 4000 feet).

Specimens. — 13729 (192, 314), parent with nest and eggs, taken at Todaya, altitude 4000 feet.

57. *Collocalia*

I collected nest (Sahl'-logg) of the Kal-ah-bahs'-bahs, a swift that I did not get. Kahl-lee-bahs'-bahs.

FURTHER ADDITIONS TO THE LIST OF PHILIPPINE BIRDS, WITH DESCRIPTIONS OF SPECIES NEW TO SCIENCE AND TO FEMALES (PREVIOUSLY UNKNOWN) OF *CYRTOSTOMUS JUGULARIS*, *DINAGATENSIS* AND *ANTHEREPTES CAGAYANENSIS*.

by

EDGAR ALEXANDER MEARNS.
(Lieutenant Colonel, U. S. Army, Retired.)

This is the seventh of a series of papers on Philippine birds, published by the writer, adding, in all, 56 species to the list of those previously known from the islands.[1] It is the writer's intention soon to publish a list of Dr. Paul Bartsch's Philippine collection of birds, in which two additional forms will be described.

1) See Proc. Biol. Soc., Washington, XVIII, January 20, 1905, pp. 1-8; February 21, 1905, p. 73; February 21, 1905, pp. 83-90; June 29, 1905, p. 185; The Phillippine Journal of Science, II, October, 1907, p. 353; pp. 355-360.

The following are additions to the species recorded from the Philippine Islands:

Sterna longipennis Nordmann.

Nordmann's Tern.

I collected five specimens (Nos. 14065-69, author's collection) of this species, in Basilan Strait, off Zamboanga, Mindanao, April 19,1906. Four were preserved as skins (Nos. 200770-73, U.S. National Museum) and one in alcohol.

Lobipes lobatus (Linnaeus).

Northern Phalarope.

On several occasions I had seen flocks of phalaropes on the seas surfounding the Philippine Islands; and, on April 19, 1906 in Basilan

Strait, which connects the Sulu and Celebas Seas. These are Nos. 200774-6, U.S.National Museum.

Tanygnathus megalorhynchos (Boddaert).

Great-billed Parrot.

On January 23, and October 8, 1906, this large green parrot was found in considerable numbers on Sarangani and Balut Islands of the Sarangani group, off northern Mindanao. An adult female (No. 200811. U.S.National Museum) was collected on Balut Island, January 23, 1906.

The following are believed to be new to science:

Phapitreron samarensis, new species.

Samar Brown Pigeon.

Type.-No. 161096, U.S.National Museum. Adult female. Collected in March, 1888, on the Island of Samar, Philippine Islands, by Dr. F. S. Bourns.

Characters.- Resembling Phapitreron breverostris , but with forehead, chin, and throat whiter than in P. abbifrons McGregor. From P. breverostris it is readily distinguishable by the white forehead, chin, and upper throat, also by the much greater amount of coppery amethystine reflections on the crown breast and upper back, and by the usual absence absence of green reflections on the side of the hind-head below the suborbital white stripe; and the underparts are much paler. From P. abbifrons it may be at once distinguished by the different color of the under parts, which lack the olivaceous-gray on the breast, and is more ochraceous on the abdomen; and the coppery reflections on the breast of P. samarensis and upper back are entirely absent in P. abbifrons.

Measurements of type. (from well-made skin of female). Total length, 230; wing, 124; tail, 95; culmen and cere (chord), 14; tarsus, 19; middle toe with claw, 26, "Eyes pink, Feet, base of mandible, and around eyes, dark purple. Tip of bill black. Egg taken from ovary (F. S. Bourns)".

Measurements of adult male (No. 161095, U.S.National Museum, collected in April, 1888, on the Island of Samar, by Dr. F. S. Bourns).- Wing, 129; tail, 95; culmen and cere (chord), 14.5; tarsus, 20, middle toe with claw, 27.

Muscadivores palmacensis freeri?, new species.

Palmas Island Fruit-eating Pigeon.

Type.-No. 200839, U.S.National Museum. Adult male, Collected January 21, 1906 on Palmas Island, in the Celebes Sea, Philippine Islands, by Edgar A. Mearns. (original number, 13889).

Characters.- Closely related to Muscedivores pickeringi from Mangsee Island, north of Borneo, on the west side of the Sulu Sea; also to Muscadivores langhornei Mearns, from West Bolod Island, southeast of the Sulu Sea and near the Island of Basilau. From the type of pickeringi (No. 15732 U.S.N.M.) it differs in being paler, with much less vinaceous color on the chin, throat, breast, and under tail-coverts. The wing is ten millimeters shorter. From langhornei which it resembles more closely in the coloration of the under parts, it can be distinguished at a glance by the dark color of the mantle, rump, and upper tail-coverts.

Adult male (type, killed January 21).- Head, neck, upper back, and under parts, lilac-gray, purest on the upper side of neck and upper back, washed with vinaceous on crown, ear-coverts, and breast, fading to whitish around base of bill and shading to drab-gray on legs

and crissum; scapulars, back, rump, and wing-coverts mouse-gray, lustrous in a certain light; wing-quills and upper tail-coverts dark mouse gray, with subdued reflections of violet, coppery, and green; rectrices lustrous golden green above, smoke-gray below; flanks, axillars, and lining of wings clear gray. An adult male in fresh plumage, shot by Dr. Paul C. Freer, October 7, 1906, only differs from the type in being appreciably darker. The sexes are practically alike in size and color.

Colors of soft parts.- Two mated pairs, about to breed, had the soft parts colored exactly alike, January 21, 1906: Iris red; eyelids and feet vinaceous; claws dusky purplish gray; bare space surrounding eye, pale plumbeous; bill pale bluish gray at tip, darker - plumbeous - at base. Testicles functionally enlarged.

Measurements of two adult males (type and topotype, measured fresh by the author).- Total length, 420, 430; alar expanse, 735, 750; wing, 240, 240; tail 156, 160; culmen (chord) 20,20; tarsus, 32,34; middle toe with claw, 46, 49.

Otus steerei new species

Tumindao Scops Owl.

Type.- No. 210752, U.S.National Museum. Adult male. Collected by Edgar A. Mearns, October 13, 1906, on Tumindao Island, off Sitanki Island, Philippine Islands.

Characters.- Very similar to the Celebesian Otus menadensis, from which it may be distinguished by being larger, with upper parts darker, with more of the black verniculations; black centers to the feathers of the underparts much less conspicuous; feathers of tarsus more heavily cross-barred with blackish. Of the Philippine species it is most closely related to Otus from Culion Id.

Measurements.- Wing 157; tail, 84; culmen from cere (chord), 15; tarsus, 33. Iris yellow; bill and feet greenish (from fresh specimen). The stomach of the type contained insects.

Prioniturus malindangensis, new species.

Mount Malindang Racquet-tailed Parrot.

Type.- No. 200887, U. S. National Museum. Adult female. Collected at 5,000 feet altitude on Mount Lebo, a spur of Mount Malindang, Misamis Province, northwestern Mindanao, Philippine Islands, May 14, 1906, by Edgar A. Mearns (original number, 14, 131).

Characters.- Closely related to Prioniturus waterstradti Rothschild, from Mount Apo, southeastern Mindanao, from which it may be distinguished by its larger size, much yellower coloring of underside, greener, less brownish back and scapulars, longer tail but much shorter naked shafts to the central pair of feathers.

Adult female, (type and only specimen).- Upperparts green, with slight touches of bluish on forehead, and a light greenish brown rump, as in P. waterstradti; wings bright green above, with con inner webs blackish, and outer webs narrowly edged with yellow; edge of wing pale yellow; rectrices green above tipped with dull black, beryl green on under side, the shafts and spatules of the central pair dull black, with webs all green to the naked shafts; entire underparts golden green; axillars and lining of wings oil green; underside of primaries dull black, broadly bordered on the inner webs with beryl green. Iris dark brown; bill pale brown color, faintly plumbeous at base and tip of mandibles; feet and claws plumbeous (from fresh specimen).

Measurements of type (female).- Wing, 153; tail, 79 (to end of lengthened central pair, 126); culmen from cere (chord), 20; tarsus, 16; middle toe with claw, 25.

Measurements of adult female topotype of P. waterstradti (No. 192136, U.S.National Museum).- Wing, 145; tail, 75 (to end of lengthened central pair 151); culmen from cere (chord), 18; tarsus, 15; middle toe with claw, 25 (skin).

Yungipicus siasiensis, new species

Siasi Pigmy Woodpecker.

Type.- No. 210765, U.S.National Museum. Adult male from Siassi Island, Philippines, October 12, 1906, by Edgar A. Mearns. (original number 14401.)

Mr. E. Hargitt, in the original description of "Yungipicus ramsayi" in the "Ibis" for 1881, page 598, gave the type-locality as "North-east Borneo"; but the same author, in the "British Museum Catalogue of Birds", Vol. XVIII, p. 335, states that the type was an adult male, collected by A. Everett, in the "Sulu Islands".

An adult male specimen (No. 211344, U.S.National Museum) collected by Dr. Paul Bartsch, February 23, 1908, on Papahag Island, off Tawi-Tawi, one of the southern islands of the Sulu group, agrees with Hargitt's Yungipicus ramsayi.

Adult male (type).- Similar to the male of Y. ramsayi, but with a smaller bill and without white markings on the upper surface of the primaries or secondaries except a small concealed white spot on inner webs of several secondaries, and with much less white on the inner margins of the inner webs on under side of wing; and the orange-yellow of the under parts is much more restricted, being confined to a narrow band across the chest.

Adult female (No. 210746, U.S.National Museum, killed at the same time and place as the type, with which it was apparently mated). Similar to the male, but lacking the elongated scarlet feathers on the edge of the posterior half of the crown and occiput, the entire upper surface of head and neck being dark brown. The white markings of the upper and under sides of the wings are restricted to the same extent as those of the type, and tend to form a very narrow browish white

margin to the inner webs of the innermost secondaries, below, instead of forming squarish detached white spots as in Y. ramsayi; the orange-yellow pectoral band as in the male.

Measurements of Yungipicus new species.- Adult male (type): Wing, 83; tail, 47; culmen, 19.5. Adult female (No. 210764, U.S. National Museum; topotype): Wing, 85; tail, 49; culmen, 20.2.

Measurements of Yungipicus ramsayi.- Adult male (No. 211344, U. S. National Museum): Wing, 85; tail, 47; culmen, 18.

Genus Rhinomyias

Mindanao Rufous-tailed Flycatcher.

The series of this genus in the U.S.N.M. shows that there are three geographical forms, from the islands of Basilan, Mindanao, and Samar, respectively.

Compared with the Samar and Mindanao forms the Basilan form, R. ruficauda ruficauda, has the under parts whiter, middle of chest grayer, sides of chest and flanks a grayer grown, with entire side of head slate-gray.

R. mindanensis and samarensis both have brown checks, and differ from each other in size, the Mindano form being larger. The upper surfaces are of a lighter, more olivaceous, and less rufescent color.

Type of Rhinomyias ruficauda mindanensis No. 190247, U.S.National Museum. Adult male, collected by the writer at Pantar, Mindanao, P. I., August 24, 1903. Orig. No. 12929.

Cryptolopha malindangensis, new species.

Mount Malindang Flycatcher-Warbler.

Type.- No. 202360, U.S.National Museum. Adult male. Summit of Grand Malindang Mountain (altitude slightly above 9000 feet), Misamis Province, northwestern Mindanao, Philippine Islands, June 6, 1906. Collected by Edgar A. Mearns (original number 14275).

Characters.- Similar to Cryplolopha mindanensis Hartert, from from Mount Apo, Mindanao, but smaller, less yellow above and below, and with a distinct yellowish-white postocular-streak extending to the occiput; bill flesh color instead of yellow on base of mandible; feet grayish flesh color instead of plumbeous.

Adult male.- Upperparts olive-green, darkest on the crown; wings and tail dark brown, broadly bordered with olive-green on the outer webs, but with outer rectrix white to the base, edged with pale yellow basally and with olive-brown terminally on outer web; second rectrix dark brown at base of inner web, white on terminal two-thirds, yellow on basal half od outer web, and olive-brown on terminal half; third rectrix edged with white at tip of inner web, and yellow on outer web at base; loral and post-ocular streak yellowish white; entire underparts sulphur yellow obscured by pale olive-green centers to the feathers; under tail-coverts plain sulphur yellow; sides of chest and flanks olive-green, streaked with yellow; axillars and lining of wings pale sulphur-yellow; cheeks pale sulphur yellow mottled with very pale olive-green.

Comparative measurements of Cryptolopha mindanensis and C. malindangensis.- Adult males (from skins): Wing, 58-56; tail, 48-46; bill from nostril, 7-7; tarsus, 21-21.

~~Cryptolophia malindangensis~~

Material.- 5~~[illegible]~~ ~~See Index?~~ specimens of Cryptolopha mindanensis and 11 of malindangensis.

Range.- from 5000 to 9000 feet on the Malindang Mountains.

Psendotharrhaleus malindangensis, new species

Mount Malindang Wood-accentor.

Type.- No. 210,853, U.S.National Museum. Adult male. Summit of Mount Malindang, northwestern Mindanao, Philippine Islands, altitude slightly above 9000 feet, June 6, 1906. Collected by Edgar A/ Mearns (original number 14277).

Characters. The largest known species of Psendotharrhalus; gray of cheeks and supra-orbital stripe obscured by heavy markings of brown; feathers of chest heavily marked with black centers.

Adult male (type and only specimen)- General color above burnt umber, washed with Vandyke brown on rump and upper tail-coverts; tail darker; wing-quills brownish black, with outer webs broadly margined with the same color as the upperparts, and extending to the outer webs of the underside of wing; head sepia above, without an appreciable supraorbital stripe; sides of head grayish brown maculed with bistre; chin and u per throat dirty whitish; much obscured by dusky macules occupying the centers of the feathers; middle of chest, gray, heavily marked with blackish centers to the feathers; sides, axillars, crissum, and under tail-coverts, axillars and lining of wings, like the back, this color shading to wood brown on middle of belly; Iris brown; bill plumbeous-black; feet and claws brown (from fresh specimen). The following measurements were taken from the type specimen, freshly killed, by the writer: Total length, 196; alar expanse, 212; wing, 66; tail, 90; culmen (chord), 16.5; bill from nostril, 10.3; from occiput to tip of bill, 42; tarsus,

28; middle tow with claw, 25.

This bird was usually found under mossy logs. Its note resembles the alarm call of the American *Pipilo fuscus mesoleucus*.

Dr. Goodfellow noted Psendotharrhalus grescipectus, on Apo, as having the "Iris dark brown; bill black; feet and nails rusty-brown (in the male), dull reddish-brown (in the female)."

No. 14277 Male ad. Summit of Mt. Malindang. Alt. 9000 feet. June 6, 1906.

"Iris brown; bill plumbeous-black; feet and claws brown. 196; 212; 66; 90; culmen (chord), 16.5; bill from nostril, 103; from tip of bill to occiput, 42; tarsus, 28; middle toe with claw, 25. This bird is usually found under mossy logs. Its note resembles the alarm call of the American Pipolo fuscus mesoleucus.

Psendotharrhaleus caudatus

15405 - 208365 (male ?) ad. July 26, 1907. Haight's. Altitude, 7000 feet.

15439 - 208366. Female, ad. July 29, 1907. Haight's. Altitude 7000 feet. 197; 198; 62; 90; cul., 14; nost., 9; tarsus, 28, rectc., 25.

"Iris light brown. Bill dark brown above, slaty brown below. Feet and claws uniform purplish brown."

Brachypteryx malindangensis, new species

Mount Malindang Shortwing.

Type.- No. 202,137, U.S.National Museum. Adult female. Summit of Grand Malindang Mountains, altitude 9000 feet, Misamis Province, northwestern Mindanao, Philippine Islands, June 5, 1906. Collected by Edgar A. Mearns (original number 14289).

Characters. Most closely related to Brachyperyx brunneiceps Grant and B. mindanensis Mearns. Smaller than brunneiceps, about equalling mindanensis; coloration very dark; russet of front of head intensified to almost a burnt umber, and not extending backward beyond the eyes; edge and lining of wings, slate color, instead of rusty.

Adult male (No. 202136, U.S.National Museum. A topotype from the summet of Mount Malindang, altitude 9,000 feet, June 5, 1906).- Uniformly slate-black, becoming practically black on the whole head, except a minute and wholly concealed supraorbital white spot. Iris dark reddish brown; bill all jet black; feet and claws plumbeous-black (from fresh specimen).

Adult female.- Front of head back to the eyes rusty burnt-umber, with eye-ring of same color; hind half of head, neck all round, and all of body except abdomen, blackish slate; abdomen washed with brownish gray; wings and tail brownish black, washed with slate color; edge and lining of wings slate color, not russet. The colors of the iris, bill, and feet were noted as exactly like those of the male topotype.

Measurements.- Adult male (No. 202136 U.S.National Museum): Total length, 160; alar expanse, 222; wing, 70; tail, 60; culmen (chord), 14.5; bill from nostril, 9; tarsus, 32; middle toe with

claw, 24. Adult female (type): Total length, 148; alar expanse, 213; wing, 66; tail, 53; culmen (chord), 13; bill from nostril 8.5; tarsus, 34; middle toe with claw, 24.5.

Brachypterys malindangensis

14269 Female type.

148; 213; 66; 53; ;3; 34; 24.5.

Colors of soft parts like No. 14268.

14268 Male,ad.

160; 222; 70; 60; 14.5; 32; 24.

Iris dark reddish brown. Bill all jet black. Feet and claws plumbeous black. The white over eye is concealed and reduced to a very small patch.

Brachypteryx nundanensis

Male,ad. 158; 220; 70; 62; 14; nost., 9.5; tarsus,33; rectc., 23. Iris dark brown; bill, feet, and claws gray black, darker than the plumage.

Female,ad. 155; 218; 70; 50; 13; nost., 8.6; tarsus, 33; rectc., 22. Iris brown; bill and feet gray-black.

Hylotorpe apoensis basilanica, new subspecies.

Basilan Island Thick-head.

Type.- No. 161534, U.S.National Museum. Adult male. Collected on the Island of Basilan, Philippine Islands, November 8, 1887, by D. C. Worcester.

Adult Male.- Similar to typical Hylotorpe apoensis, but paler throughout, with crown brownish instead of grayish; slightly smaller; underparts canary yellow instead of lemon yellow. Wing, 78; tail, 67; culmen, 14; bill from nostril, 9.2; tarsus, 17.5; "Iris brown. Bill black".

Adult female (No. 201258 U.S.National Museum. Collected on the Island of Basilan, Philippine Islands, February 19, 1906, by Edgar A. Mearns. Original number, 13962.)- Paler and dingier than the male; underparts pale canary yellow from throat backward. Wing, 71; tail, 61; tarsus, 17.5.

Remarks.- Specimens in the U. S. National Museum, collected on the Island of Siquijor, P. I., by D. C. Bourns and D. C. Worcester, are exactly like Basilan specimens taken in February, 1888, and must be included as belonging to this subspecies. Lowland birds from Minnanao Island connect the forms apoensis and basilanica.

Zosterops goodfellowi malindangensis, new subspecies.

Mount Malindang Silver-eye.

Type.- No. 202401, U. S. National Museum. Adult male. Summit of Mount Lebo (Malindang group), altitude 5,750 feet. Misamis Province, northwestern Mindanao, May 21, 1906. Collected by Edgar A. Mearns (original number, 14169).

Characters.- Smaller than typical Zosteops goodfellowi, with stouter bill; front half of head grayish brown instead of olive-green; nape greenish-gray instead of olive-green; auricular patch

more sharply defined and less greenish; malar region washed with brown instead of being dirty white; throat and upper breast more distinctly washed with brown. The iris is reddish brown in both; bill black in affinis, plumbeous-black in mindanensis; feet and claws pale olive, yellowish on under side of toes in both.

Measurements of Zosterops goodfellowi goodfellowi and Zosterops goodfellowi malindangensis contrasted.- Adult males (measured in the flesh by the writer): Total length, 156-147; alar expanse, 231-218; wing, 75-70; tail 61-57; culmen (chord) 13 - 15; tarsus, 21-21; middle toe with claw, 16-16.5. Adult females (measurements from dry skins): Wing, 70-63; tail, 59-54; culmen (chord), 12.5-13.5; tarsus, 21-21.

Material.- Seven specimens of typical goodfellowi from Mount Apo and eleven of the present form from the Malindang group of mountains.

Range.- From 5000 feet on Lebo and Bliss peaks up to the summit of Grand Malindang (900 feet).

Cyrtostomus jugularus mindanensis, new subspecies.

Mindanao yellow-breasted Sungird.

Type.- No. 192061 U.S.National Museum. Adult male. Collected January 24, 1904, at Zamboanga, western Mindanao, Philippine Islands, by Edgar A. Mearns. (original number, 13177).

Characters.- Most closely resembling Cyrtostomus jugularis jugulars of Luzon, but slightly larger, with the upperparts olive-green instead of brownish olive-gray; underparts nearly uniform lemon yellow instead of canary yellow.

Measurements.- Males

Comparative measurements.- Males of Cyrtostomus jugularis mindanensis average: wing, 54; tail, 44; culmen (chord), 18; tarsus,

15. Females of C. j. mindanensis average: wing, 52; tail 38; culmen, 17; tarsus, 14.

Material.- 26 skins, from Mindanao and the off-lying islands of Taliaud and Suluan, the latter showing a tendency to intergrade with C. j. woodi. One skin from Cebu Island.

Remarks.- Skins from northern Mindanao, adjoining the range of C. jugularis diagatensis (Bucas, Duiagat, Leyte, Basiao, Bohol and Penay islands), show no tendency to intergrade with dinagatensis, but, on the contrary, have the underparts paler yellow than any others from Mindanao. The range of dinagatensis separates the ranges of jugularis and mindanensis.

Cyrtostomus woodi, new species.

Wood Yellow-breasted Sunbird.

Type.- No. 200602, U.S.National Museum. Adult male from one of the Three Islands, south of Sibutu Island, Philippine Islands, January 5, 1906. Shot by Leonard Wood, Jr., for whom the species is named.

Characters.- Smaller than Cyrtostomus aurora, C. jugularis, or C. dinagatensis, old males differing from all three in the metallic reflections on the middle of the dark metallic plastron, which are bluish and violet instead of green-blue; underparts shading very gradually from rich orange, adjoining the dark metallic plastron, to clear yellow on the crissum and under tail-coverts; back a more golden olive-green than in the other Philippine forms; forehead lores and superciliary stripe solid metallic violet-purple.

Young male (No. 200600 U.S.National Museum, from Dammi Island in the Sulu Sea, January 4, 1906).- Middle of chin, fore neck, and

throat metallic blue; sides f neck and chest orange-yellow, shading to canary yellow on crissum and under tail-coverts; upperparts golden olive-green; quills dark grayish brown, edged with olive-green; like the back; restrices tipped with yellowish white, broadest externally.

Measurements of type(skin).- Wing, 52; tail, 40; culmen (chord 16.5; bill from nostril, 14; tarsus, 14.5; middle toe with claw 11.5.

Geographical range.- Known only from three islets south of Sibutu Island, and from Darmi Island. There being no specimens from the neighboring small islands, it is not possible to define its range at the present time.

Description of the female of Cryptostomus jugularis dinagatensis

Dinagat Orange-breasted Sunbird.

No. 202451 from Bucas Island, P. I., October 4, 1906. Shot by Captain Halstead Dorey, U. S. Army. Similar to females of C. jugularis but greener above, and paler yellow below.

This proves to be a very distinct form, having for its range the islands of Bucas, Dinagat, Leyte, and Bohol.

Description of female of Anthreptes cagayanensis Mearns

Cagayan Sulu Brown-throated Sunbird.

Characters of adult female (No. 202463 U.S.National Museum, collected October 15, 1907, on Cagayan Sulu Island, in the Sulu Sea, Philippine Islands, by Edgar A. Mearns).- Differs from females of Anthreptes griseogularis in the absence of the grayish white chin and throat; from A. chlorogaster in the yellower coloration of the middle underparts and greener upper parts; and from A. malaccensis, only in the greater contrast of the canary yellow of the middle underparts with the green color of the flanks, which in A. cagayanensis are pale iol-green, and in A. malaccensis olive-yellow. I have no female of A. wiglesworthi for comparison. Wing, 65; tail, 47; culmen (chord), 15.5; bill from nostril, 12; tarsus, 15.8.

Pyrrhula steerei, new species.

Steere Bullfinch. *

Type.- No. 210772, U.S.National Museum. Adult male. Summit of Mount Bliss, Malindang group, altitude 5750 feet, northwestern Mindanao, Philippine Islands, June 9, 1906. Collected by Edgar A. Mearns (original number 14278).

Characters.- Similar to Pyrrhula leucogenys Grant, described in The Bulletin of the British Ornithologists' Club, No. XXVIII, page XLI, June 29, 1895, from the mountains of Lepanto in northern Luzon. The Mindanao bird differs in being smaller, with a differently colored, much smaller bill, more brownish coloration, and a tendency to whitening on the middle of the abdomen which the Luzon bird lacks.

Adult male (type, killed July 9.) - Crown and front of head all round, to just behind eye, black; crown glossed with purplish blue; lores, malar region, chin and upper throat dead black; auriculars white; scapulars and luterscapular region deep broccoli brown; rump white; rectrices, upper tail-coverts, primaries, secondaries, tertials, primary coverts, and base of greater wing coverts, glossy bluish purplish black; lesser wing-coverts dark broccoli brown; terminal two-fifths of greater wing-coverts broccoli brown, paler terminally; outer web of innermost secondary edged externally with orange-vermilion; underparts broccoli brown, shading to whitish on middle of belly and to tawny ochraceous on crissum; axillars pure white; under wing-coverts brown at base, broadly white terminally; under side of shafts of primary quills white nearly to the tips. Fresh specimens, including the type, were ~~kikkn~~ noted in the field as having the iris dark brown; bill plumbeous-black, perceptibly

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* The section to which this bullfinch belings has recently been made the subgenus Protopyrrhula Bianchi. Bulls. Acad.Imp.sci.,St.Petersb.,Ser. XXV,1906,159-198. Subg. for P. ripalensis, erythrocephala, erythoca and leucogenys.

color at extreme base; feet brownish flesh color, with under side of toes yellowish; claws brown. In the dry skins the bills are uniformly plumbeous-black.

Adult female (Nos. 202265 and 210771, U.S.National Museum, topttypes taken May 27 and 30, respectively).- Exactl like the male, except that the outer web of the innermost secondary is edged externally with yellowish orange instead of orange-vermilion.

Comparison with Pyrrhula leucogenys.- The material used in making the comparison with Pyrrhula leucogenys consists of two adult females of P. leucogenus, one (No. 172435 U.S.N.M.) a topotype collected by Mr. John Whitehead, in Lepanto Province, Luzon, P. I., the other (No. 208,435 U.S.N.M.)collected by the author near Paoay, Benguet Province, Luzon, P. I. The first was killed December 19, 1894, the second July 28, 1907. The December bird is in fresher plumage and somewhat darker and browner than the July specimen. The two localities were in sight of each other, perhaps twenty miles apart. In both of the Luzon birds the bills still show a large amount of yellow, as shown in Mr. Meuleman's excellent figures of the male and female (Plate XIV) published in the Ibis for 1895, opposite page 455. From a female specimen of P. leucogenys (No. 208435 U.S.N.M.), just shot, I noted the following: Iris grayish brown; bill yellowish horn color, broadly black on commissural line and at tip; feet brownish flesh color, claws darker brown.

Comparative measurements of fresh specimens(by the author).- No. 210771, U.S.National Museum, an adult female topotype of Pyrrhula whitcheadi, and No. 208435, an adult female of P. leucogenys, from near the type locality, presented the following measurements: Length, 152-168; alar expanse, 242-259; wing, 77-82; tail, 65-71; culmen (chord), 10.5-11.3; tarsus, 17.5 - 18.5; middle toe with its claw,

16.5 - 19.

Remark.- It seems fitting that this species should be named in honor of Mr. John Whitehead, who first made the remarkable discovery of the genus Pyrrhula in the Philippines.

In the following table, measurements of Pyrrhula leucogenus and and P. whiteheadi, taken from dry skins, by Mr. J. H. Riley, are presented.

No. 14216, Female,ad. May 27, 1906.

Summit of Mt. Bliss.

"Iris dark brown. Bill plumbeous-black, horn color at base of mandible. Feet brownish flesh color, under side of toes yellowish; claws brown."

No measurements.

No. 14250 Female,ad. May 30, 1906.

Summit of Mt. Bliss, Mindanao, Alt. 5750 ft.

"Iris brown. Bill black, horn color at base of maxilla. Feet brownish flesh color, yellow under toes; claws brown."

152; 242; 77; 65; 10.5; 17.5; 16.5.

No. 14278. Male,ad. June 9, 1906.

Summit of Mt. Bliss, etc. Iris dark brown. Bill plumbeous-black, perceptibly horn color at extreme base; feet brownish flesh color with under side of toes yellowish; claws brown.

No. 15427, Female,ad. July 28, 1907.

"168; 259; 82; 71; 11.3; depth 11.3; width 11; tarsus, 18.5; middle toe with its claw, 24.5. Iris grayish brown. Bill yellowish horn color, broadly black on commissural line and at tip. Feet brownish flesh color, claws darker brown."

No. 875 Whitehead Coll. Female.

No. 172435 U.S.N.M.

"J. W. North Luzon. 19. 12. 94. This winter specimen, taken December 19, has the bill and feet colored like the above speci-

men (15427), taken July 28, 1907. The winter bird is browner and in less faded plumage; otherwise the two are alike.

Dicrurus balicassius mindorensis, new subspecies.

Mindoro Drongo Shrike.

Type.- No. 202,009, U. S. National Museum. Adult male, collected at 3000 feet altitude on Mount Halcon, Mindoro Island, November 30, 1906, by Edgar A. Mearns.

Characters.- Slightly larger than Dicrurus balicassius from Luzon Island; also differing in having the metallic reflections of the upper parts and breast greenish blue instead of bluish green.

Measurements of type (adult male).- Wing, 148; tail, 130; culmen, 27; tarsus, 25.

Measurements of three adult female topotypes (Nos. 202006-8, U. S. National Museum).- Wing, 143, 146, 144; tail, 128, 129, 129; culmen, 27.5, 31, 29; tarsus, 26, 25, 25.

Chibia cagayanensis, new species.

Cagayan Sulu Drongo Shrike.

Type.- No. 191894, U.S.National Museum. Adult female from Cagayan Sulu Island, in the western part of the Sulu Sea, Philippine Islands, collected February 26, 1904, by Edgar A. Mearns. (Original number, 13285).

Characters.- Very similar to Chibia palawanensis, differing only in its somewhat larger size, shallower forking of the tail, the narrower and very much smaller spangles on the breast, and in the absence of metallic green on the upper tail-coverts.

Measurements of skin (type and only specimen).- Length, 260; wing, 136; tail, 126; emargination of tail, 16; culmen (chord) 28.5; tarsus, 24.5.

[illegible]

[illegible]

[illegible]

Brachypterys malindangensis

14269 Female type.

148; 213; 66; 53; ;3; 34; 24.5.

Colors of soft parts like No. 14268.

14268 Male,ad.

160; 222; 70; 60; 14.5; 32; 24.

Iris dark reddish brown. Bill all jet black. Feet and claws plumbeous black. The white over eye is concealed and reduced to a very small patch.

Brachypteryx nundanensis

Male,ad. 158; 220; 70; 62; 14; nost., 9.5; tarsus,33; rectc., 23. Iris dark brown; bill, feet, and claws gray black, darker than the plumage.

Female,ad. 155; 218; 70; 50; 13; nost., 8.6; tarsus, 33; rectc., 22. Iris brown; bill and feet gray-black.

Dr. Goodfellow noted Psendotharrhalus greseipectus, on Apo, as having the "Iris dark brown; bill black; feet and nails rusty-brown (in the male), dull reddish-brown (in the female)."

No. 14277 Male ad. Summit of Mt. Malindang. Alt. 9000 feet. June 6, 1906.

"Iris brown; bill plumbeous-black; feet and claws brown. 196; 212; 66; 90; culmen (chord), 16.5; bill from nostril, 103; from tip of bill to occiput, 42; tarsus, 28; middle toe with claw, 25. This bird is usually found under mossy logs. Its note resembles the alarm call of the American Pipolo fuscus mesoleucus.

Psendotharrhaleus caudatus

15405 - 208365 (male ?) ad. July 26, 1907. Haight's. Altitude, 7000 feet.

15439 - 208366. Female,ad. July 29, 1907. Haight's. Altitude 7000 feet. 197; 198; 62; 90; cul., 14; nost., 9; tarsus, 28, rectc., 25.

"Iris light brown. Bill dark brown above, slaty brown below. Feet and claws uniform purplish brown."

Pseudotriorchalcus cardalus

15405 – 208365 (♂?) ad. July 26, 1907
Haight's. Altitude 7000 feet.

15439 – 208366 ♀ ad. July 29, 1907
Haight's. Altitude 7000 feet
197; 198; 62; 90; cul., 14; rost., 9;
tarsus, 28; mid. c., 25.
"Iris light brown. Bill dark brown above, slaty brown below. Feet and claws uniform purplish brown.

Dr. Deane's now noted Records [illegible] "Iris dark brown; bill black; feet and nails hurty-brown (in the male), dull reddish-brown (in the female)."

No. 14277 ♂ ad. Summit of Mt. Malindang Alt. 9000 feet. June 6, 1906.
"Iris brown; bill plumbeous-black; feet and claws brown. 196; 212; 66; 90; culmen (chord), 16.5; bill from nostril, 10.3; from tip of bill to occiput, 42; tarsus, 28; middle toe with claw, 25. This bird is usually found under mossy logs. Its note resembles the alarm call of the American Pitilo fuscus and solivagus.

No. 14216 ♀ ad. May 27, 1906.
Summit of Mt. Bliss
"Iris dark brown. Bill plumbeous-black, horn color at base of mandible. Feet brownish flesh color; under side of toes yellowish; claws brown."
No measurements

No. 14250 ♀ ad. May 30, 1906.
Summit of Mt. Bliss, Mindanao, Alt. 5750 ft.
"Iris brown. Bill black, horn color at base of maxilla. Feet brownish flesh color, yellow under toes; claws brown."
152; 242; 77; 65; 10.5; 17.5; 16.5.

No. 14278. ♂ ad. June 9, 1906.
Summit of Mt. Bliss, etc. Iris dark brown. Bill plumbeous-black, perceptibly horn color at extreme base; feet brownish flesh color with under side of toes yellowish; claws brown

No. 15427. ♀ ad. July 28, 1907
"168; 259; 82; 71; 11.3; depth, 11.3; width 11; tarsus, 18.5; middle toe with its claw, 24.5. Iris grayish brown. Bill yellowish horn color, broadly black on commissural line and at tip. Feet brownish flesh color, claws darker brown."

No. 875 Whitehead Coll. ♀
172435 USNM.
"J. W. North Luzon. 19.12.94.
This winter specimen, taken December 19, has the bill and feet colored like the above specimen (15427), taken July 28, 1907. The winter bird is browner and in less faded plumage; otherwise the two are alike.

No. 14216, Female,ad. May 27, 1906.

Summit of Mt. Bliss.

"Iris dark brown. Bill plumbeous-black, horn color at base of mandible. Feet brownish flesh color, under side of toes yellowish; claws brown."

No measurements.

No. 14250 Female,ad. May 30, 1906.

Summit of Mt. Bliss, Mindanao, Alt. 5750 ft.

"Iris brown. Bill black, horn color at base of maxilla. Feet brownish flesh color, yellow under toes; claws brown."

152; 242; 77; 65; 10.5; 17.5; 16.5.

√ No. 14278. Male,ad. June 9, 1906.

Summit of Mt. Bliss, etc. Iris dark brown. Bill plumbeous-black, perceptibly horn color at extreme base; feet brownish flesh color with under side of toes yellowish; claws brown.

√ No. 15427, Female,ad. July 28, 1907.

"168; 259; 82; 71; 11.3; depth 11.3; width 11; tarsus, 18.5; middle toe with its claw, 24.5. √ Iris grayish brown. Bill yellowish horn color, broadly black on commissural line and at tip. Feet brownish flesh color, claws darker brown."

No. 875 Whitehead Coll. Female.

No. 172435 U.S.N.M.

"J. W. North Luzon. 19. 12. 94. This winter specimen, taken December 19, has the bill and feet colored like the above speci-

men (15427), taken July 28, 1907. The winter bird is browner and in less faded plumage; otherwise the two are alike.